Music : Articles on Indian music

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Some Results of the Study of American Indian Music*

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FIRST of all, let me express my high appreciation of the honor of the invitation from M. Const. Maltezos, asking that I send him a note upon my study of Indian music, for transmission to the Academy of Athens. I am aware of M. Maltezos' deep and extended research in the music of ancient peoples, in both the old and new worlds. To that research he has brought the scholarly attainments of the physicist. My own work is done from the standpoint of a musician and an observer of human nature. Music is essentially a vital and human expression especially in a primitive race like the American Indian. It has been said that "the North American Indians give us a fuller knowledge than any other existing race affords of the manner of working of the primitive creative mind." The study of Indian music has, therefore, a relation to the general subject of primitive music in all races.

The Indians living in North America did not share the high development of those living in Central America and in certain parts of South America. There are no records in stone to tell us of their early art. The minds of the old men were the repositories of the wisdom and experience of the tribe, and it was the duty of the old men to transmit this orally to the next generation each man instructing his oldest son. In development of memory the Indian excelled, but in logic and deductions from facts he did not excel. His culture and mental habit were not such as to produce a musical system comparable, for example, to that of the Hindu or the Chinese. The Indians are not a homogeneous people or nation but consist of many tribes which differ in language and important customs.

The following incident shows the manner of reasoning by a Sioux Indian who was highly respected among his people. He found a globular stone on top of a hill, similar to stones that were abundant in a river not far distant. On being asked how he explained the peculiar shape of the stone he said it had become globular by looking at the sun since "things that look at each other for a long time will come to have a resemblance." He carried this stone on his person and attributed the good health of himself and his family to its presence. In order to stimulate the supposedly magic power of the stone he sang a song, according to an Indian custom which will be described in this paper:

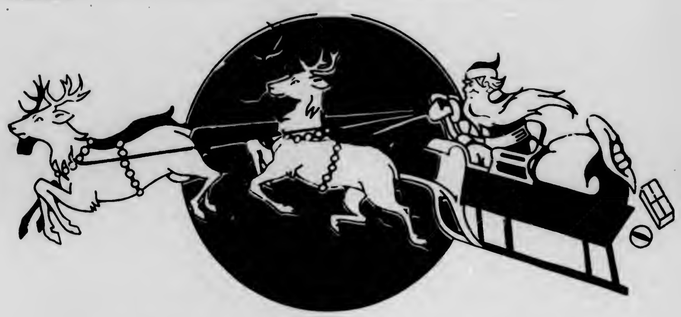
Agassiz, the great naturalist, said that "the function of science is to strive to interpret what actually exists." In the study of Indian music the facts are the vocal sounds produced by the Indians and recorded by means of the phonograph. The interpretation must concern itself with the life and customs of the Indian, and with his mental attitude. If we were to try to understand Indian songs without taking all these into consideration we would become involved in a maze of speculation. Al-

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Christmas Greetings

PHOENIX INDIAN VOCATIONAL SCHOOL extends its most cordial Christmas greetings to all readers of *The Native American.* This special desire that peace may reign on earth and that goodwill may prevail with all men is a desire which we try to make a part of our daily creed throughout the year, but which it is the happy custom to emphasize at Christmas time. May we all join in the sentiment.

though we admit the kinship of all humanity, the Indian belongs to a different race from our own. His habit of thought and his standard of beauty are not like ours, and even more different is his idea of the function of music in his daily life. Music, to the American Indian, was not primarily an art to be cultivated for pleasure. It was part of the means by which he exercised magic, and it lay, in part, in the field of religion.

In the oldest times of which we have any knowledge, the Indians believed that songs were received in dreams, and this continues to the present time among many old Indians. The "dream" of the Indian is a trance-like condition induced by abstinence from food and intense concentration of the mind. While in this condition the Indian imagines himself visited by a supernatural being which promises its aid in any difficulties that may befall him. The mysterious visitant usually sings a song which the dreamer learns and is told to sing when asking for the promised aid. On awaking, he remembers the song and it becomes his most valued possession. It can hardly be supposed that such songs are based upon an intelligent musical system. The profound students and thinkers among the Indians were concerned with means of obtaining supernatural help, not with calculations nor material facts. They were mystics and their old songs can not be separated from their mysticism.

A type of song which is probably as old as the "dream song" is that connected with folk-tales, many of which were of cosmic significance and intended for the instruction of the people. Melodies were introduced at intervals during a long story and were sung by the narrator. In the most primitive tribe under the observation the melody was sung only once, after which the narrator resumed his story. It appears that the song broke the monotony of the narrative in an agreeable, rhythmic manner, and it usually represented the expression of some character in the story, either human or otherwise. For example, one story recorded by the writer was concerning a contest between a beaver and a plant called "fox-tail" as to which could cause rain to fall. Each sang his own magic song and the beaver produced the heavier downpour of rain. In explanation it was said that the beaver had a stronger supernatural helper than the flower. Can we expect to find in such material a consciously evolved musical system?

I began my study of Indian music in 1893, and have conducted that research for the Bureau of American Ethnology of the Smithsonian Institution since 1907. In the pursuit of this study I have visited many Indian reservations and recorded songs on the phonograph, transcribing and analysing about 1700 of such records. For transcription, I use the ordinary musical notation with only a few additional signs. If a tone is sung less than a quarter-tone higher than the indicated pitch I place a plus sign above the note, and if a tone is sung less than a quarter-tone below the indicated pitch a minus sign is placed above the note. A slight extending or diminishing of the length of the tone is indicated by a sign for a "hold," placed vertically above the note, the opening of the curve being toward the left if the tone is shortened and toward the right if it is prolonged. By this simple and familiar notation it is possible to present a large amount of material in a form convenient for observation. A more elaborate graphic representation would make it necessary for students to master a new medium of expression and, if accurate and adequate, would require the services of a large staff of workers. The writer has no assistants and the opportunity to secure genuine Indian songs is rapidly passing away. These are among the circumstances which justify the use of ordinary musical notation in the transcription of Indian songs. It is not claimed that Indians sing all the tones of the diatonic scale with accuracy but it will be shown that the upper partials (overtones) of a fundamental tone constitute the framework of many Indian songs. These tones are usually sung with a degree of accuracy that would be considered acceptable in a cultured singer.

The Indian produces his tone in the back of his throat, holding the lips and

teeth motionless and separating the tones by a peculiar action of the throat muscles. This tone is unfocused and frequently resembles the vocal sound produced by an animal. There is a multiplicity of by-tones which suggests that the song is progressing by minute intervals of pitch, and one of the first decisions that must be made by a student of Indian music is concerning the degree of importance to be attached to these small gradations of pitch.

It may safely be assumed that if exceedingly small intervals or gradations of pitch are consciously produced, the Indian must have an ability to discriminate such intervals when hearing them. In order to test the pitch-discrimination of Indians the writer took with her, to Indian reservations, a set of eleven standardized tuning forks, one of which gave the fundamental tone of the series ("a" prime, 435 vibrations, international pitch) while the other forks produced tones respectively 1—2, 2, 3, 4, 5, 8, 12, 17, 23, and 30 vibrations above the fundamental. These forks were lent by Dr. C. E. Seashore, Dean of the Graduate College, University of Iowa, who kindly examined the tabulated report of the result of the test. He expressed the opinion that "the abilities here shown are about as good as one would find among the average American whites under similar conditions." The ear of the Indian is trained to hear sounds which we do not notice but this test does not indicate that he has a superior perception of differences in the pitch of tones. A practical experience with Indians has convinced me that, among uncultured people, small variations in the pitch of vocal sounds are not directed by an intelligence which would entitle them to serious consideration. I do not think that a voluminous study of them would reveal any underlying system or laws. Lacking that definite purpose, the undertaking does not seem justified.

During the first year of my work with the recording phonograph I made an experiment which has an important bearing on this subject. Two phonographs were placed opposite each other in such a position that the ends of the recording horns were together. Selecting a typical record of an Indian song, I played it on one phonograph and recorded on the other. A duplicate was made from this record and so on until I had the sixth duplication of the original record. This was much softer than the original but the tones were those of the diatonic scale, sung with reasonable accuracy. The duplications had eliminated the by-tones, leaving the kernel of tone which had been obscured by the Indian's manner of rendition. As so much depended upon the accuracy of my hearing I underwent a test by Dr. C. E. Seashore in his laboratory, the result being entirely satisfactory. This may be regarded as a standardizing of the human ear in order that it may safely be used as an instrument of measurement.

An Indian seldom strikes the drum or shakes his rattle precisely with the corresponding tone of his song. Through the courtesy of Dr. Dayton C. Miller, head of the department of physics, Case School of Applied Science, Cleverland, Ohio, this peculiarity of the Indian music was given a graphic proof. The writer's phonograph was installed in Dr. Miller's laboratory, portions of two records were played by the phonograph and the sound recorded graphically by the phonodeid, an instrument of Dr. Miller's invention. In one of the songs thus studied, the portion photographed by the phonodeik was about 23 seconds' duration, as reproduced by the phonograph, and made a film record about 38 feet in length. In a detailed report on this test Dr. Miller stated that "the first beat of the pair of drumbeats follows the beginning of an accented voice tone with great regularity. Of 25 such instances identified on the phonograph the drumbeat follows the voice by 0.12 seconds in 12 cases and in no instance does the interval differ from this by more than 0.02 seconds." Other interesting results of this test are apart from our present consideration.

In order to determine whether Indian music resembles that of a European people, a comparison was made between the structure of Indian and Slovak songs, the latter being analysed by the same method employed in analysing Indian songs. The material used in this comparison consisted of 710 Indian songs from widely separated tribes and ten typical Slovak songs selected for the purpose by Mr. Ivan Daxner, secretary of the Slovanian League of America, whose cooperation is gratefully acknowledged. The Slovak songs included the Slovak national anthem, a song concerning Janosik, a very ancient melody entitled "In praise of song," a "dialogue on melody," several love songs, and folksongs concerning the plowboy and the girl who watched the geese. On comparing the structural analyses it was found that the resemblances were fewer than the differences. The Indian and Slovak songs under analysis differed in trend and in the principal interval of progression; it also appeared that the Slovak songs had more directness in beginning and more simplicity of rhythm.

In order to obtain representative material it is necessary to exercise great care in the selection of Indian singers and interpreters. To this phase of the work one must bring a knowledge of Indians which can be gained only by experience. The Indians have their standards of good singing and recognise only one correct version of a song. This version must be obtained if the work is to be reliable. One of the requirements of a good singer among the Indians is that he shall repeat a song with absolute accuracy. To the credit of Indians it may be said that repetitions after a period of weeks, months or (in one instance) after the expiration of two years have been found identical in tempo, pitch and note-value. Similarly, it is not unusual for as many as ten renditions of a song to be recorded on one phonograph cylinder without the slightest differences in the renditions. This accuracy appears in ceremonial songs and in records made by the best singers. There are other instances in which we find slight and unimportant variations in the renditions. The first is usually the best rendition in such cases but transcription is made from the clearest, wherever it occurs on the cylinder.

* * * * *

. . . Indian music is mental in its origin and the Indian evidently "thinks" most clearly the intervals which have simple vibration-ratios. His deviations involve a personal element. To follow such deviations is a part from our present purpose.

We will now proceed to a peculiarity of Indian songs which can hardly be tabulated but which is observed when the songs are studied. This may be termed an "interval formation" and has no counterpart in the music of civilization. It occurs most frequently in songs that lack a keynote and are classified as irregular in tonality. Perhaps, at some future time, the basis of classification may be changed and the songs divided into those which have a keynote and those which are formed by successive intervals. In many of the latter songs a few measures are within a small compass, the next few measures are within a different compass, and so on to the end of the song with no binding intervals that would unite these small groups in relation to a common keynote. For example, a song for the treatment of the sick, recorded by Pigeon-hawk, begins with a few measures on the decending fourth A to E, these are followed by a few measures on the decending fourth G to D, and the song closes with measures on the tones D to A. Each phrase is complete in itself, like a separate melody. In the songs of the Northwest Coast, not included in the present collective analysis, this peculiarity appears as a whole-tone formation, many songs having a compass of three or four tones with phrases based on whole tones, repeated within that compass. In such songs the feeling for a keynote is less prominent than the stepping from one tone to another which is adjacent or desirable for some other reason. This indicates the complexity of Indian music and the danger which lies in the making of generalizations.

It is difficult to trace the history of an Indian song more than 150 years and, with the utmost care in selection, we cannot be certain that every recorded melody is of purely Indian derivation. The Indians are imitative and when

visiting other localities they are particularly eager to hear and learn new songs. In this manner there may have been alien influences in their music which they do not recognise. The Yaqui Indians, living on the Mexican border, said they had two sorts of songs, one of which was their own and the other was "like Mexican music." Examples of both were recorded, the former being ceremonial songs and the latter being modern songs accompanied by the guitar. One song was recorded on Cape Flattery on the northwestern boundary of the United States, which closely resembles the Cocopa dancing songs recorded in southern Arizona by members of a tribe which lives partly in the United States and partly in Mexico. It is said that long ago the Spaniards visited Cape Flattery and this coincidence is interesting. Other songs recorded on Cape Flattery resemble chants, yet are not like the chanting in the Roman Catholic Church and we are reminded that the Russian Church is widely established in the far north. Possibly this may have influenced the Indians from Cape Flattery on some of their journeyings. Songs recorded by Indians living on the west coast of British Columbia are characterised by a fluency and easy tonefulness that bears no resemblance to typical Indian songs but is like the easy, pleasing melodies used in missions of the Roman Catholic Church. The writer was not surprised to learn that the Roman Church has missionaries in that region and that certain of the recorded songs were used in Christmas festivities. The presence of such songs demonstrates the necessity for collecting a large amount of material on which to base conclusions.

The most conservative songs of the Indians are those connected with old ceremonies, the songs hereditary in families, the songs received in fasting dreams, and the songs used in the treatment of the sick. A very large majority of the songs collected and analysed by the writer belong to these classes, but other songs are also collected in order to secure a complete representation of a region and to afford material for comparision. If modern songs should be found to predominate in a region the writer would go elsewhere to collect songs. The desirability of a field for research is estimated by the number of medicine men still living and by the extent to which the native religious customs are observed. Distance from towns is also a factor. For example, the village on Cape Flattery where work has been conducted for two seasons is reached only by water and there is only one steamer a week, carrying freight and a few passengers. In winter this boat is often unable to land because of the high waves. The isolation of this village adds value to its musical material. Other songs have been recorded in a mountain village about 130 miles from a railroad. The Indians came a considerable distance to this village in order that their songs might be recorded phonographically. On the southern desert the writer has travelled more than 80 miles from a town or a telephone to record songs from the Indians, once spending Christmas in such a locality and attending a remarkable dance that was held only on Christmas night. This dance was given on the desert sand and was a wonderful sight in the moonlight. Many similar incidents could be related but do not concern our present purpose.

Mention may here be made of the use of a rest in Indian songs. A pause for the taking of breath is noted only in records made by younger Indians. It occurs rarely and can be distinguished from a musical rest as it does not occur uniformly in all renditions of the songs. A rest occurred in only ten Chippewa songs (less than one-half of one per cent) but was found in 13 (more than 11 per cent) of the Ute songs, being given with care and distinctness. It is used to a much larger extent in the songs of southern Arizona and in those recorded on Cape Flattery. If we were to form our opinion of Indian songs according to those of the Chippewa we might imagine a resemblance to the songs of the Hindu concerning which it is said that "Rest are seldom written (except in order to break up the meter intentionally in a dramatic way) in any of their songs. . . . They appear to take breath when they want to take it, not at the end of words."* Further experience shows that such a conclusion would be erroneous, as rests are effectively used in the songs of many Indian tribes.

The suggestion that Indian melodies are based in the tone produced by an instrument is untenable, as the only instruments used by the Indians that produce tones of different pitch are the flute and whistle. The first was formerly made according to the physical measurements of the man who was to play it, and the second produces two tones by a peculiar manner of blowing it. Neither instrument is untenable, as the only accuracy to form the basis for songs.

The rhythm of Indian songs is characterised by accents unevenly spaced, transcribed as measures of different lengths. The tempo of the voice and the accompanying drum or rattle are frequently different, yet each is steadily maintained. When the tempo is the same, they frequently do not synchronize, as proven by the test conducted by Dr. Dayton C. Miller and described in this paper.

Summary: The music of the American Indians is formed and preserved mentally, not visually. The collective analysis of 1073 songs shows a perception of tones with simple ratios of vibration. These tones, however, are frequently used in what may be termed an "interval-formation" of melody which does not suggest a keynote and has no counterpart in our musical usage. The analysed songs of the North American Indians do not suggest a resemblance to the songs of Asiatic or European countries. Interesting resemblances to less distant music are occasionally noted but are considered less important than the larger data obtained through collective analysis. A group of songs now designated as irregular in tonality is reserved for further study.

The rhythm of Indians songs shows more striking peculiarities than the melodic progressions. In this connection we repeat the statement that Indian music was originally associated with the working of magic and the treatment of the sick and that its use in the old manner persists, in many localities, until the present day.

The music of the American Indian is not an art, in our use of the term, but is primarily a means by which the Indian believes that he puts himself in communication with the mysterious forces of the earth, sea, and air. These are beneficent forces, though he regards them with awe and reverence, and he looks to their aid for safety in his daily life and for success in his undertakings. The study of Indian music cannot be separated from a study of the Indian himself, his traditions and his highest beliefs.

*Fox Strangways, "Music of Hindustan," pp. 192–193.

CROSSING THE BAR

Sunset and evening star,
And one clear call for me,
And may there be no moaning of the bar
When I put out to sea.

But such a tide as moving seems asleep,
Too full for sound and foam,
When that which drew from the boundless deep,
Turns home again.

Twilight and evening bell,
And after that the dark!
And may there be no sadness of farewell
When I embark.

For tho' from out the bourne of time and place
The flood may bear me far.
I hope to see my pilot face to face
When I have crossed the bar.

—Alfred Lord Tennyson

Be too large for worry, too noble for anger, too strong for fear, and too happy to permit the presence of trouble.

A friend is one who knows all about you and loves you just the same

—American Printer.

The Native American

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STEWART LEWIS Instructor of Printing

TERMS: 50 CENTS A YEAR IN ADVANCE

My People the Sioux by Chief Standing Bear

William S. Hart, who writes an introduction to this book by Luther Standing Bear, says of him, "The author of this book may be a little short on education . . . but he has a story to tell—one that he learned in life." This it is that makes the book a fascinating one from the beginning to the end. The book is edited by E. A. Brininstool. We do not know this editor, but we wish to pay him tribute as one of the few editors of Indian stories who has not spoiled the story, nor taken the "Indian" out of it. Most "educated" Indians have but a smattering of the white man's learning, having learned a few pet phrases and copied a few popular expressions supposed to bear on the subject in hand. Many seek to maintain the reputation for being educated by using language which they never understood, and which conveys no new information to the reader or listener. Standing Bear makes none of these errors, but with the consent of his wise editor, tells a most interesting story simply and truthfully with such words as his own English vocabulary contains. When he, as a boy, began to meet the white man's civilization he expresses his reactions as we know them to have appeared to an Indian boy, and he adheres to that principle throughout the book.

Luther Standing Bear was the first son of Chief Standing Bear the First. Indians kept no calendars, but there were the twelve "moons" and each year was named for some chief event of that period, as the "Year of the big flood," or "The year of the many buffalo." The names of persons meant something, the author's mother being properly known as "Pretty Face." Men did not always receive names as boys, but might await some event or the appearance of some distinguishing characteristic. Spotted horses were greatly prized. The first Chief Standing Bear captured many spotted horses and acquired the name "Spotted Horse." This name served until a nobler one was acquired by prowess displayed in battle.

During the days of the author's youth, killing pale faces was not deemed a courageous act, the Sioux youth being taught that the white man was of a weaker race.

When the Union Pacific Railroad was built through the Sioux country a party of Indians were refused water from a tank, a serious offense from their viewpoint. When the refusal was reported to the grand council a party was organized to tear up portions of the track and wreck the train, all of which was carried out. The wrecked freight train carried the first beads used by these

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A RESEMBLANCE BETWEEN YUMAN AND PUEBLO SONGS

By FRANCES DENSMORE

AN IMPORTANT phase of any study is finding the norm of the material under observation. When this has been done, the variants can be described and put into groups which it is feasible to compare. We may even form hypotheses concerning the group differences and try to explain them.

By recording about 2,000 Indian songs and analyzing them according to a uniform system the writer has tried to find the norm of Indian singing. The amount of material is so large and the Indians have so long been in contact with the white race that any characteristic occurring in a majority of the songs under analysis may be somewhat removed from a primitive expression. Before considering a rhythmic phase of what appears to be the norm in available Indian songs we will, therefore, consider two phases of song that are particularly primitive. Only a limited amount of this class of material can be obtained at the present time. The more primitive of these phases is the melodic narrative, or "rudimentary song," studied among the northern Ute and found in some other tribes. A story is told in a long melody which suggests improvisation and has no rhythmic divisions. There is, however, a melodic and rhythmic idea which is carried forward, as the songs reflect the characteristics of the animals mentioned in the story.[1] Extended records of this class of material were transcribed. Another primitive form consists of a short melody interpolated in a spoken narrative. Such songs were recorded among Algonquian tribes as well as in southern Arizona and on the Northwest Coast. In Arizona they were sung four times, but among the primitive northwestern tribes the songs were sung only once, breaking the monotony of a long narrative by introducing a different rhythm. These songs were small in compass and, generally speaking, they lacked melodic interest. With the change of custom these songs, in many tribes, have become detached from the narrative and are used in a casual manner. Thus we find the songs of ancient legends sung for the amusement of children while the legend is briefly summarized or entirely forgotten. The inner meaning of the story is gone, and the little melody is adrift in a world that smiles at its simplicity.

Returning to our search for the norm of Indian songs, we note a phase of their rhythm. A cumulative analysis of 1,553 Indian songs shows that 64 percent contain a rhythmic unit. The songs analyzed singly and not yet included in the cumulative analysis contain the same characteristic. It ap-

[1] Frances Densmore, Northern Ute Music, BAE-B 75: 200-204. 1922.

(p)sits, si, s, woman's sister's daughter; p seems third person; compare pcit above; ts may be secondary; the basic form may be s.

it(k), woman's sister's son.

(p)nuk, man's sister-in-law, woman's brother-in-law; p may be third person.

skai' (Klikitat), man's brother-in-law.

miyu, man's brother-in-law.

awit'(ał), man's brother-in-law, probably awit', 'ał being secondary; awi't, in-law of opposite sex after decease of kin intermediary; awit(as), male's brother's or uncle's or cousin's wife; awit is again primary.

atc, woman's sister-in-law; possibly historically related to ts forms for younger sibling, above.

(p)cac, man's father-in-law or son-in-law; p seems third person.

(p)natc, tc, woman's parent-in-law or daughter-in-law; p seems third person; tc may be primary—compare with atc and ts above.

cəwax̣, woman's son-in-law, man's mother-in-law.

am, husband.

a'cam, wife; c may be a feminine element; other Sahaptin languages, especially Molale, should be compared for cognate female gender c; am may then be the root form.

(pi')wunac, (pi')nuwac, distant relation, cousin; pi or p may be third person.

x̣a'i, friend, brother, male to male.

t'łə'ks, friend, sister, female to female.

k'uɬi, deceased child; master, honored one.

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pears, therefore, that a rhythmic pattern is part of the norm of these Indian songs. If the pattern is short, it is designated as a rhythmic unit, and if long, it is called a rhythmic period, these terms being intended simply to assist the observation of the melody. As a simple parallel in our own music we may cite the structure of "America." In this melody, according to the terminology used by the writer, the rhythmic unit would be the little phrase occurring first with the words "'tis of thee," and the rhythmic period would be the first line and others with the same meter, the intervening lines being regarded as connective.

The material collected by the writer is chiefly from the following areas and tribes:

Northern woodland	Chippewa, Menominee
Plains	Sioux, Mandan, Hidatsa, Pawnee, Winnebago
High plateau	Northern Ute
Desert	Papago, Yuma, Cocopa, Yaqui
Northwest coast (at Neah bay, Washington)	Makah, Quileute, Clayoquot
Pueblo	Acoma, Isleta, Cochiti
British Columbian (at Chilliwack, B.C.)	Tsimshian, Nootka, and other tribes

Also the Seminole of southern Florida and the Tule (San Blas) Indians of Panama.

The Pueblo songs were obtained from members of these tribes temporarily in a low altitude and the Tule songs were recorded in Washington, D.C.

A large majority of these songs contain a short rhythmic unit. Many forms of rhythmic structure occur in the songs of each tribe, but a sharp line of demarcation occurs between the San Blas, Yuman, and Pueblo songs on the one hand, as against the songs of Papago, Yaqui, and all other recorded tribes. This difference overshadows other differences which would enter into a detailed analysis of the two groups, such as the pause of indefinite length which occurs between the periods of certain Yuman and Yaqui songs, or the change of pitch gradually higher or lower, which occurs in many Pueblo records. The writer may be permitted to say this large difference came as a surprise during the progress of transcribing and analyzing songs, and that no explanation is advanced. The observation is presented as it developed in the course of work.

Prior to the recording of Yuman songs (1922) the rhythmic periods in recorded songs of all tribes were of approximately the same length, and it is safe to state that a majority of songs had a definite rhythmic form. The simplest of these forms were the following:

1. Four periods with the same rhythm (Bul. 53, no. 28; Bul. 61, no. 138; Bul. 75, no. 42).
2. Four periods with the same rhythm and an extension at the close (Bul. 75, no. 32; Bul. 80, no. 20).
3. Four periods, the first two and last two having the same rhythm (Bul. 75, no. 21; Bul. 90, no. 98).
4. Four periods with a change of rhythm in the third (Bul. 53, no. 39).
5. Five periods of equal length, with or without an extension at the close (Bul. 53, nos. 38 and 147; Bul. 80, no. 24).
6. A form with rhythmic completeness (not consisting of periods) which may or may not contain a rhythmic unit (Bul. 90, no. 109).

A form consisting of three short periods occurs occasionally and has been noted in songs associated with supernatural aid or beliefs connected with spirits (Bul. 53, no. 32).

These simple forms are frequently modified by the introduction of tones between the rhythmic periods or the use of phrases without definite rhythm. In many cases the note-values depend upon the number of syllables in the words of the song. There are many songs with rhythmic units but no large rhythms, either of periods or of the song itself. We are dealing with a large mass of primitive material, and it is impossible to make statements that include every song, but the outstanding facts are that the songs recorded before the Yuman were characterized by rhythmic units, and, when divisible into periods, these sections of the song were of approximately the same length.

On transcribing the Yuman songs the writer found them to consist of two or more distinct periods of very uneven length. In the songs previously studied the periods were generally about four to seven or eight measures long but it was found that the Yuman songs contained periods of about 50 measures. Moreover, the Indians were able to describe the form of the songs saying "near the end there is a short part that goes up higher." For example, in one Yuma song the first period contains 58 measures and the second 29 measures, followed by a return of the first period. In another the first period contains 20, the second 19, and the third 12 measures, followed by a return of the second and then the first period. In another the first and second periods contained 12 and the third period contained only six measures. Rhythmic units occur frequently throughout Yuma and Cocopa songs and their designation by a bracket was retained, the periods being marked with the letters A, B, C, and D, according to their number. Many Yuman songs are shorter than the foregoing but this is the typical form.

The presence of a group of Tule ("white") Indians in Washington afforded opportunity for a study of their music, nine songs being recorded. These have a compass of only three or four tones and are not thematic in character, though one song contains recurrent phrases. The "swing" of the rhythm is long and the transcriptions were extended, one containing about 200 measures. The words were improvised along accustomed lines and the melody was likewise varied by the singer, though certain characteristics were retained in every performance of a song. The Tule songs were without the definite form of the Yuma in which "the part near the end goes up higher," but in their long, swinging sequences of tone there is a resemblance to the Yuma songs that were used in treating the sick. Both the San Blas and the Yuma were distinctly different from songs formerly recorded, except as the San Blas songs bore a resemblance to the "rudimentary songs" of the Ute Indians.

The following verses are illustrative of the contrasting rhythms already described. They are not translations of Indian songs, neither are they in the exact rhythms of Indian songs, but they are similar in style.

Rhythmic forms which characterize songs of Plains, Woodland, and certain other tribes

1. Four periods of equal length with an extension at the end:

A light in the midnight sky,
The moon in Pueblo land,
I watch the stars in their path
And the shadows that cross the silent mesa trail.

2. Four periods with a change of rhythm in the third period:

A light in the midnight sky,
The moon in Pueblo land,
And shining like snow in a northern clime
The waste of the desert sand.

3. Five periods of equal length:

A light in the midnight sky,
The moon in Pueblo land,
I wait for the red in the east
And watch the patient stars
As I tread the desert sand.

4. Rhythmic unity in the song as a whole:

The moonlight rests upon the desert sand and turns its yellow into glistening white like snow.

Rhythmic form characterizing Yuman and Pueblo (Acoma, Isleta, and Cochiti) songs, with recurring periods, the order of recurrence not being arbitrary

(1) The light on the mesa is clear and white, and the sand is shining like the snow in that strange country of which we have heard,

(2) The moon is rising above the pueblo.
(3) High in the sky a star!
(2) The moon is shining over the village,
(2) The moon is shining above the village,
(1) The light on the mesa is clear and white, and the sand shines like the northern snow,
(2) While the moon rises over the pueblo.

The following is a portion of the translation of a wedding song, recorded by a member of the Tule (San Blas) tribe. The translation follows the words of the interpreter as closely as possible and the result was approved by the Indians. In the translation are the long, flowing rhythms that characterize the songs, although the exact meter of the music is not found in the words.

Now we will have the wedding feast.
The morning sun is halfway up the sky,
Come! It is time for the wedding.
The chief musician and his assistant are in their places,
Four men trot across the room and blow smoke on the two musicians,
Smoke from a great cigar of our tobacco, rolled one leaf upon another,
Protecting those who will play the flute and rattle on your wedding day.[2]

After the foregoing paper was in type the writer recorded 200 songs among the Seminole Indians of Florida, finding examples of the form which was first noted among the Yuma. While the Seminole songs were being recorded a song of the Yuman pattern was noticed and the writer asked about the song. In reply the singer said it was "a song with a different place in the middle." Questioned further he said the song had three parts and that the first and third could be of any length while "the second part is short and always sung alike." This showed the Yuman pattern clearly, but the singer was not given to understand the importance of his information. On further questioning he said the Seminole have many such songs and that he could sing those or the shorter melodies as desired. They did not appear to belong to any particular class of songs, but he was singing only the old melodies. Numerous songs of this type were recorded and have been transcribed. The statement that the first and third sections (or periods) can be of any length refers to a "working over" of the phrases, with repetitions, changes in the order of the phrases and slight changes in note values, as well as the insertion of phrases having a different but unimportant rhythm. These occurred among 75 songs recorded by Panther (known as Josie Billie), a leader of the Big Cypress Swamp band of Seminole living in the Everglades. Billie Stuart, a member of the Cow Creek band of Seminole living near Lake Okeechobee recorded 117 Seminole songs, but this form was not observed during the recording. Neither is it found among the songs thus far transcribed. It

[2] Frances Densmore, Music of the Tule Indians of Panama, SI-MC 77: 23, 24, 1926.

occurred, however, in one of eight songs recorded by Billie Stuart and attributed by him to Indians whom he called "Caloosa" and also "mountain men." He said these people had a village near a Seminole village and each tribe visited the other, joining the dances and learning songs, but later they fought and the Seminole severely defeated the other tribe, so that they disappeared.

This peculiar form may be seen by the following schedules of measures in Seminole songs.—

Bird dance: Introduction 2 measures, period A, 9 measures; B 4 measures.

Bird Dance song: Period A, 16 measures; B, 8 measures, followed by a repetition of A with slight changes, the song ending with period B unchanged.

Hunting Dance song: Period A, 13 measures; B, 3 measures, followed by the last half of A.

Hunting Dance song: Period A, 16 measures; B, 11 measures, followed by a repetition of period A.

Corn Dance song, attributed to the Caloosa: Period A, 65 measures; B, 33 measures.

None of the songs recorded by Seminole contained more than two periods, the third section being a recurrence of the first.

A modified example of this form was recently found in a very old Winnebago song which was sung when a certain medicinal herb was dug. The schedule of this song is as follows: Period A, 12 measures; monotone connective phrase, 2 measures, period B, 5 measures, followed by a repetition of 9 measures of period A. The high pitch of period B and its change of rhythm identify the form, as well as the relative length of the periods. The lively character which appears in the second period of this form is represented by a faster tempo in the Winnebago song. On being asked whether Little Hill, the original owner of the song, ever travelled toward the south it was said that he "used to sing Iowa songs, from next to the Otoes." Other songs attributed to Little Hill do not show this form. In order to ascertain its frequency among Winnebago songs the writer examined about 200 of her transcriptions of songs from this tribe and found 5 modified examples among 17 songs of the peyote ceremony. The first period was not as long, relatively, as in the form noted first in Yuman songs and a rhythmic unit was more prominent, but this period was followed by a repetition of one tone and a short rest, after which a second and much shorter phrase was introduced, having an entirely different and more lively rhythm and being, with one exception, higher in compass, either in single tones or in its pitch-level. While these songs are used ceremonially by the Winnebago their origin is uncertain, as it was said that many peyote songs came from the Kiowa and Comanche. A resemblance to this form was found in two old Winnebago war songs, two songs concerning the recent war, one song of the Medicine Lodge, and one song used in treating the sick.

Mention may also be made of a resemblance between some of the Seminole Bird Dance songs and one or two of the Cocopa Bird Dance songs, recorded by Cocopa who were Mexican subjects but lived within the borders of Arizona. This consists in a change of rhythm too subtle for description. The "Yuma form" was not found in recorded Cocopa songs though the Cocopa are constantly associated with the

Yuma in their ceremonies. Neither did it occur in more than 200 songs recorded among the Papago whose territory adjoins that of the Yuma on the east.

From the writer's observation it appears that the norm of Indian songs is to be found in their rhythm, not in their melodic progression. A rhythmic unit occurs in a majority of the Indian songs under systematic analysis and it appears, from the foregoing, that a characteristic rhythmic pattern occurs in the songs of certain tribes. It also appears that this pattern, in a modified form, may have travelled far among other tribes. It is possible that the rhythmic pattern of songs may afford evidence of former contact between tribes that are widely separated at the present time.

RED WING, MINNESOTA

Am. Anthropologist, Vol. 11, No. 3.

July-Sept. 1909.

Dr Franz Boas, in commenting on this paper, stated that the anthropological problems of southeastern Asia revolved about three races, the Malayan, the Negrito, and a short but light people represented by the Veddahs of Ceylon.

Immediately after the discussion of the paper the Society held its annual meeting. The reports of the officers were read and the following officers were elected for the ensuing year: President, J. Walter Fewkes; Vice-president, James Mooney; Secretary, John R. Swanton; Treasurer, George C. Maynard; Additional members of the Board of Managers, I. M. Casanowicz, J. N. B. Hewitt, F. W. Hodge, C. H. Robinson, Mrs M. R. Seaman.

Meeting of April 27, 1909

A special meeting was held on this date in the interest of Indian music. The paper of the evening, on *The Study of Indian Music*, was by Miss FRANCES DENSMORE, who is engaged in this study among the Chippewa of Minnesota for the Bureau of American Ethnology. Miss Densmore treated her subject as in answer to the following questions: (1) Why is it done? (2) How is it done? (3) What has been accomplished during the past year?

(1) In answer to the first question, Miss Densmore stated that the purpose of the present work is to find by analysis what constitutes Indian song and musical performance, and to make the results of the study available and clear to those who are not musicians but who are interested in the general progress of science. The music of civilized man is an art; it conforms to known laws. The music of uncivilized man is a spontaneous expression; its form is determined by instinct, habit, and a sense of pleasure. Apparent freedom is here, yet nothing is free, for beneath all apparent freedom lies law, unseen but absolute. The natural laws which govern primitive musical expression can be determined only by the analysis of primitive songs and musical performances, and by a systematic classification of the data thus obtained. The purpose of the present work is the collection and classification of data with a view to determining the natural laws which govern musical expression. The task in its entirety belongs not to one lifetime but to the patient years which know neither haste nor weariness.

(2) The work is done by making phonographic records of Indian songs on the reservation, transcribing these records, analyzing both record and transcription, and tabulating the analyses according to a definite system.

Miss Densmore then gave a word-picture of the Red Lake reserva-

tion in northern Minnesota, and a description of the dances which she witnessed there the summer preceding. Several songs collected by means of the phonograph were sung with piano accompaniment of extremely simple chords. Numerous phonograph records were given, the purpose of which was to show the use of the phonograph as a musical notebook.

(3) The third question had been answered in part, Miss Densmore explained, by showing some of the material collected, but the more important part remained. It was by analysis, quite as much as by the collection of material, that this branch of research was to be made effective.

Miss Densmore explained her reasons for using ordinary musical notation, with a few additional signs, in transcribing Indian songs, dwelling on the fact that the Indians under her observation frequently use a wavering tone as an ornamentation in their singing. She also described interesting experiments by means of which she had discovered a kernel of tone in fairly accurate intonation upon phonograph records of existing discordant songs. Attention was called to the fact that the principal overtones are sung more correctly than other tones, also that accidentals are sung accurately when diatonic tunes in the same song are given with faulty intonation. This points to a mental origin for the tone, those tones which, consciously or unconsciously, are most strongly impressed upon the mind being sung most accurately. An interesting point was the statement that some songs were found to be melodic and others harmonic in structure, examples of each class of songs being given. Miss Densmore stated that she found the rhythm to be most peculiar in songs intended to exert a mental influence, as "medicine" songs, certain Midé songs, and also songs intended to incite to war. The difference between the metric unit and the rhythmic unit in a song was fully explained. No attempt was made to enter deeply into the psychological phase of Indian music, yet it was plainly shown that interesting investigations could be made in that direction. The lecture closed with a group of songs, sung with Indian drum and with piano, a native drawing of one of the songs being shown upon the blackboard.

The subject was discussed by a number of members and guests, many of whom are professionally interested in music.

JOHN R. SWANTON,
Secretary.

and is apt also to suffer mitigation in the course of subsequent study.

C. J. KEYSER

COLUMBIA UNIVERSITY

Hopi Songs. By BENJAMIN IVES GILMAN, Secretary of the Museum of Fine Arts, Boston, Mass. Hemenway Southwestern Expedition. A Journal of American Ethnology and Archæology. Fifth and Concluding Volume. Pp. xi + 235. Boston and New York, Houghton, Mifflin Company. 1908.

The text of the volume is divided into three sections: I., The Rote Song of the Hopi; II., The Phonographic Method; III., Notation, Diagrams and Comments. Seventeen Hopi songs are included in section III. A brief account of The Hemenway Southwest Expedition closes the volume.

The author opens his treatise by saying:

The study of Hopi, or Moqui, singing, to which this volume is devoted, completes an inquiry into Pueblo music begun in 1891 with a study of Zuni melodies. The records upon which both investigations have been based were obtained in Arizona by Dr. J. Walter Fewkes, now of the Bureau of Ethnology, Washington, at the time in charge of the Hemenway Southwestern Expedition, who first applied the phonograph to the preservation and study of aboriginal folk-lore.

Of his previous study the author writes (p. 11):

The major thesis of the "Zuni Melodies"—that Pueblo music is without scale—is strongly confirmed by this cumulative evidence. The diatonic form of the Hopi songs is (*a*) harmonic necessity or (*b*) apperceptive illusion. In large measure their adiatonic features are at once (*c*) intentional and (*d*) inexplicable by interpolation and transposition. The minor thesis of the "Zuni Melodies"—that "In this archaic stage of the art the scales are not formed but forming"—is rather weakened than corroborated by a closer study of Pueblo music. Its bent toward change inspires a doubt whether, unless by outward compulsion, it would ever submit to the trammels of a system. It appears an unhistoric rather than a prehistoric art.

Under the head Scales an Instrumental Product; the Voice Determining their General Form, the Ear, the Hand and the Eye their Varieties, the author skillfully proceeded to show that "Although the voice provides the raw material for scale building," the instruments have rendered service, so that

It would appear that while still disembodied music tends to remain adiatonic, though always of necessity diatonoid. Only when incarnate by instrumental constraint does it chose, because it must, the best of all possible yokes.

Other factors have influenced scale development so that

Scales may result with which the voice has had little to do, giving back to music, at the convenience and pleasure of ear and hand and eye, a semblance of the liberty of its vocal stage.

Under the head of Freedom, a characteristic of Pueblo music, the author writes:

Apart from the tendency to consonant intervals no metes and bounds to invention manifest themselves in these melodies, and they may apparently be altered by every performer.

In this connection a footnote calls attention to a fact presented at Berlin in 1888 before the International Congress of Americanists that

The anatomists of the Hemenway Southwestern Expedition found the hyoid bone of the ancient skeletons exhumed on the Rio Salado exceptionally elastic in structure. The position of this bone at the base of the tongue makes it an important factor both in speech and song.

This fact should not be forgotten when considering the data presented in this volume as of wide application. Nor can the statement that songs "may apparently be altered by every performer" be accepted as true of Indian songs in general. Accuracy in the rendition of a song, particularly of one that was a part of a religious ceremony, was insisted upon. In some of the tribes a mistake, or variation, in singing a song, constituted so grave a matter that it put a stop to the ceremony, until after a rite of contrition had been performed; that being finished the ceremony had to begin afresh. That there were slight variations in pitch and intonations was true, but they were such as occur among ordinary singers and did not affect the movement and flow of the melody, which the

...the work.

The pistils of the lilies are in general ali...

singers were careful not to disturb, as the song in all religious rites was regarded as a message to the supernatural.

Section II. deals with The Phonographic Method. The author says of the phonograph: It "makes possible a hitherto unheard-of thing, the detailed study of an individual performance of music. It opens a field of investigation, that of the actual events of which music consists, which has hitherto been accessible to observation in only a very limited way—while a performance lasts, and in so far as it can afterward be recalled by memory." From the premise that "Music is an art of interval and measure primarily, and one of timbre secondarily" the author proceded to a phonographic study of interval in Hopi singing. He says:

> With a series of tests not psychological but physical I endeavored both to find the principal limitations of the instrument by the trial of various conditions of inscription and reproduction, and to determine the degree of exactness of its best performance. The method consisted mainly in noting the amount of variation in the rapidity of pulsations of sound called beats produced between a phonographic reproduction of a note held continuously and another note known to be of constant pitch.

Then follows a lengthy account of his work upon these tests and the conclusion:

> As an apparatus for the reproduction of textures of interval the phonograph may fairly be called an instrument of precision.

Of the "method and symbolism of the notation" we read:

> Like the records of Zuni music these . . . are the result of an attempt to judge the tones delivered by the phonograph by means of the sense for difference of pitch alone, without aid from the sense of interval. My aim has been to make a separate estimate of the pitch of each individual note of each performance, through its comparison with one or more of the series of tones at intervals of a tempered semi-tone, or 100 cents, given in the notes of an ordinary harmonium. This comparison was made, as before, by silencing the phonograph the moment the note to be judged had been reached, and immediately thereafter sounding a harmonium note. . . .

For the expression of "the minute scale of fourteenths of a tone made the basis" of his records the author adopted modifications of the historical notation by which he says:

> There is thus afforded for each of the fourteenths of a tone assumed as the steps in the scale of these notations a gradation of position easily distinguishable from every other.

He further remarks:

> The attempt to follow the musical practise of non-European peoples with such minuteness must justify itself, either on the ground that accuracy of observation is a thing worthy to be aimed at for its own sake, or on the ground that in this branch of research such a degree of it has veritable value for purposes of theory.

Section III. is composed of the presentation of each of the seventeen Hopi songs; given first on the usual clef, next the phonographic record according to his plan of notation, then a chart showing the "Course of Tone," followed by more or less elaborate "Comments." In some of these latter the author shows a fine appreciation of "these wild flowers of fancy, the wanton yield of naïve delight in the vocal production of interval," as in connection with "Snake Song No. 4" where he says:

> The interest of the song lies in its stately rhythm, occasionally delicately varied; and in this deliberate ascent, as if from level to level of the singers native mesa, with a pause midway in each to rally loiterers.

The volume represents much careful work and is a valuable contribution to the study of the phonetics of some kinds of Indian singing. The quality of tone is not touched upon and unfortunately the songs under consideration do not present a wide range of rhythms so that that interesting aspect is not dwelt upon. All the records under examination are from single singers. The Indian solo singer is apt to waver more in pitch than when he sings with a group. A number of voices not only strengthens the tone but steadies the interval. Moreover, comparatively few Indian songs are intended to be sung by one voice only, so that such records as those presented in the volume can hardly be regarded as representative of Indian music. They do not picture the songs as they appeal to the Indians, nor does the dissection of tones, as here so ably given, assist our race to discern the beauty that lurks in a vast number of the songs of the American Indian.

Alice C. Fletcher.

January 4, 1928

~~Washington, from seed collected by J. Burtt Davy, no. 189, Foreign Seed and~~ Plant Introduction no. 48462; sheet no. 1,235,736, collected by Dr. H. L. Shantz, no. 325, at Kafue, Northern Rhodesia, Foreign Seed and Plant Introduction no. 49590.

Shantzia may be distinguished from *Thespesia* by (a) its regularly dehiscing capsule, with thick woody valves containing sugar and a great quantity of mucilage; and (b) the involucral bracts numbering 9–11 instead of from 3–5.

ETHNOLOGY.—*The melodic formation of Indian songs.*[1] FRANCES DENSMORE. Bureau of American Ethnology.

The study of Indian music must be done with little coöperation on the part of the Indian beyond his willingness to sing into the horn of a phonograph. If an old song is under consideration he will say that it was received in a dream—perhaps by his grandfather. If one asks how his grandfather prepared himself to receive the song, the Indian replies, "By going without food, and going away by himself for several days." One may ask, "Did you ever see your grandfather?" The reply will probably be, "I do not mean my father's father. I mean a man who lived very long ago. Maybe my father's grandfather." The next question might be, "Where did you learn that song?" The Indian might reply, "From my father. That song is handed down in my family." The foregoing would be a typical conversation except that its facts are too familiar for such detailed inquiry. Many songs are also obtained from old men who themselves have received them in fasting dreams.

The first student of Indian music was Theodor Baker who wrote that "The Indians say that the songs connected with religious concepts were of supernatural origin and that the newer songs are only imitations of these songs."[2] The Indians had nothing corresponding to our popular music and it appears that practically all the old songs were received in dreams. This was the observation of Miss Alice C. Fletcher and is that of the present writer.

It is scarcely necessary to state that the fasting dream (or trance) was the means by which the old Indians believed that they received enlightenment on all important subjects. In a dream the medicine man accompanying a war party received knowledge of the enemy's location, or a doctor learned what ailed his patient, or a man located lost articles. If the dream promised power to accomplish some difficult undertaking there came to the mind of the dreamer a song which

[1] Received November 23, 1927.

[2] BAKER, THEODOR. *Uber der Musik der nordamerikanischen Wilden.* Leipzig. 1882.

(December 28). I am always rooting it up. With regard to your question as to the fruit being edible: The inner layers of the pericarp become glutinous enclosing the seeds. The natives peel off the rind and suck this part, spitting out the seeds. It induces a great flow of saliva, hence the Dutch name "snot apple,' from the verb *snotteren* to snivel. Later the layers dry up and the fruit dehisces by five valves. The fruit to eat must be gathered when it is green and juicy. Europeans don't eat it, except children. Another interesting thing about this shrub is that it harbours the so-called cotton stainer, a red and black beetle (*Dysdercus*), so, as we are just beginning to cultivate cotton in Southern Rhodesia, we think we should destroy the shrub."

The mucilaginous property of the inner layers of the pericarp mentioned by Miss Steedman was observed by the writer when examining the dried capsule. One of the five valves was soaked for a few hours in a large test tube in about five cubic centimeters of water. The mucilage thus extracted formed so stiff a gelle that it could not be poured out of the tube. A valve from a capsule of ordinary cotton subjected to the same conditions yielded only a slight amount of mucilage.

Several authors have at various times placed in the genus *Thespesia* five or six quite different species of tropical trees or shrubs having as a common characteristic an involucre composed of from 3 to 12 narrow bracts, adnate to the base of the calyx, which are dropped before the opening of the flower. A careful examination of the gross morphology of all of these included species develops differences far more fundamental than their agreement as to the form of involucre, so that the reference of several of them to other genera is regarded by the writer as justifiable. The Rhodesian shrub described above is one of these and it is further believed that it represents a new genus which the writer takes pleasure in naming in honor of Dr. Homer L. Shantz, who first brought it to his attention.

Shantzia Lewton, gen. nov.

Shrubs or small trees, 2 to 5 meters high; woody throughout. Leaves petiolate, cordate, entire or lobed, palmately veined, with a slit-like nectary on the mid-vein below. Flowers usually single in the axils of the uppermost leaves; borne on short fruiting branches usually formed of but one internode and sometimes bearing a leaf. Peduncle bearing at its base 2 subulate, deciduous bracts. Involucre formed of 9 to 11 linear caducous bracts. Calyx cupuliform, entire, or with 1 to 5 minute teeth. Ovary 4- to 5-celled with 2 or more ovules in each cell. Capsule ovoid or obovoid, ligneous, opening tardily, the valves containing much mucilage and sugar. Seeds obovoid, angled on the ventral side, rounded on the dorsal, densely covered with short reddish-brown tomentum. Cotyledons punctate with brown dots. Species two or three; Southwest Africa.

TYPE: *Thespesia garckeana* Ferd. Hoffmann. Two specimens in the U. S. National Herbarium represent the genus: Sheet no. 1,235,735, a specimen grown in a greenhouse on the grounds of the Department of Agriculture in

he was told to sing in order to obtain the promised power. It is apart from the purpose of this article to discuss the stimulus to the brain produced by lack of food, and the interesting element of rhythm presented by the resultant song. The data are sufficient to show the futility of searching in such material for a conscious, preconceived tonal system. There is a wide gulf between a belief in a dream and the knowledge of the monochord and its mathematical divisions which formed the basis of the musical system of the Greeks.

Turning from the realm of inspiration we seek information concerning the actual composition of songs. For example, the Indians say that a returning war party composed a song concerning its victory, composing the song in one of its camps and singing it in the victory dance that followed its return. If there were a "professional musician" or some person corresponding to a ballad-singer in the war party we should find that the composing of the song was entrusted to him. Instead, I am informed that "the warriors made up the song," indicating that several men collaborated in producing the melody. A song was recorded among the Sioux that was the work of several men in cooperation. The song differed from the older songs in a lack of unity and coherence. It contained too many peculiarities. The same quality characterised a Winnebago song said to have been composed in the same manner. A song was never changed after being approved by the group composing it, but no trace of a system in their composition has been found.

In some tribes it appears that a steady physical motion was considered an aid to musical composition. Thus two women at Neah Bay, Washington, said that when they were young girls they composed songs together when sitting in a swing, and that a young boy was accustomed to swing them while they "made up songs." They said that they "thought of something pleasant, were swung to and fro, and pretty soon they could sing about what they were thinking." An Indian of British Columbia said that songs "came to him" as he walked, and the Indians living on the west coast of British Columbia are accustomed to go out in a "gasoline boat" when they wish to compose songs, remaining in the boats until the song is finished. None of these procedures suggests a definite system governing the form of musical compositions, nor a technical training as preparation for the work of producing songs. If these are lacking, are we not confronted by the sense of pleasure as a determining factor in the selection of tones?

It is the purpose of the present article to show, by accumulated data, that the tones which give pleasure (or satisfaction) to the Indians

bear a relation to the natural laws of sound. It will be shown that the upper partials of a fundamental constitute the framework of many Indian melodies. Whether the Indians received this suggestion from sounds in nature, from the sound of the wooden flute, or from very early contact with the white race must remain a matter of conjecture. The writer has been informed of a statement that "In 1640 or near that date, the missionaries to the Indians found that they took very kindly to the hymns and other songs of the white man and were often heard singing them." This was mentioned "in contrast with the Japanese of about 1850, the Egyptians and Syrians, all of whom when visiting England were much bored with European music." It is known that music travels far among primitive folk and we cannot, at this time, determine to what extent the songs of the Atlantic seaboard were carried to the middle west, but, in the writer's observation, the upper partial tones of a fundamental are more in evidence among the songs of Indians belonging to Algonquian and Siouan stocks than among the Indians of the Mexican border and the Northwest Coast. It is scarcely possible to trace the antiquity of a song more than 150 or 200 years, which does not bridge the distance to the first contact between the Indians and members of the white race.

The permanence of a melody is proven by repeated renditions by the same or other singers. If a song is repeated after the lapse of days or months it will be found, on comparing the phonograph records, that the tempo and pitch as well as the note-values are identical, providing the records are made by a competent singer. The repetition is made with the accuracy that depends upon memory without the aid of any notation. It is the writer's custom to record several consecutive renditions of a song, the phonograph cylinder sometimes containing 8 or 10 renditions, these being uniform in every respect. The rhythmic accuracy is like that of a metronome except in songs where a *rubato* is employed, as in some of the songs for treating the sick. The melodic accuracy is naturally that of a human voice, not a mechanism, and, if recorded by a tonodeik or similar apparatus, would not show the accuracy of a cultivated voice nor of an instrument. We must allow the Indian the same latitude in "keeping the key" that we allow a member of our own race, and even more. If we do not attribute the slight variations in pitch to his peculiar manner of singing, combined with the human quality of the material under observation, we must assume that he has an ability to produce and consciously repeat minute gradations of pitch, his ability far surpassing that of our own singers. Such gradations of pitch are used intentionally and for effect by violinists but not by our singers. There is no doubt, as indicated, that the Indian produces tones distant from one another less than the interval of a semitone but his manner of tone production is entirely different from ours and the tone may often be described as unfocused. It should be clearly understood that the piano scale is used as standard of measurement by the present writer because the deviations from that scale are not given by the Indians with a consistency and sureness that justifies the use of a more finely graded standard. It would scarcely be possible to show, by any system of notation, the gradations of pitch that occur in the singing of many Indians during a period of an hour, and it would be even more impossible to study the music of a tribe or group of tribes by such a method. Individuals differ, the singing of some persons being more steady in tone and easier to transcribe in ordinary notation than the singing of others.

The student of Indian music must learn to detect the kernal or center of gravity in the tone produced by the Indian. In my observation, the Indian usually sings the tones corresponding to the octave, twelfth and fifth of the piano scale with an accuracy that would be considered acceptable in a singer of our own race. Other musicians listening to records of Indian songs have corroborated this statement. Generally speaking the intonation on the fourth and seventh above the keynote are the most uncertain, but these are the tones that occur with least frequency in Indian songs. The major third is usually given with reasonable accuracy but the interval transcribed as a minor third is more often a distinct non-major third than a minor third according to the piano scale. The accuracy of intonation varies from the overtones of a fundamental, already indicated as reasonably correct, to tones which are exceedingly difficult to determine and transcribe. If a tone is persistently sung less than a quarter tone above the pitch of a tone in the piano scale it is the writer's custom to place a plus sign above the note in the transcription. A tone persistently sung less than a quarter tone below the piano pitch is indicated by a minus sign below the note. These are the only deviations from ordinary musical notation used by the writer, the purpose being to show the characteristics of Indian songs in a simple manner, thus making it possible to analyse a large amount of material.

Mention should here be made of the Indian's ability to keep the intonation on the octave when it occurs as the boundary of a melody as well as when it is a direct progression. Many Indian songs have a compass of 8 tones and the singer may vary the accuracy of the intervals within that octave, but the highest and lowest tones of his song

will be an octave apart. The same feeling for a true octave appears in songs of larger compass, and is the more interesting as the lowest tone of the octave frequently does not appear until the close of the song.

In all considerations of Indian music it should be borne in mind that our conclusions are based upon the evidence of a recording apparatus that is adapted to field work and is used under varied conditions. We have not a laboratory apparatus nor ideal working conditions but we have reliable old-time Indians, working under circumstances that place them at their ease. Whatever peculiarities appear in the record are natural to the Indians, who are conscientiously trying to sing their old songs correctly in order that they may be preserved for posterity. The same Indians, if taken to a city where a more elaborate mechanism were available, might be less able to concentrate upon their singing and thus give less reliable material. In a majority of her work the writer has used a Columbia graphophone, with specially constructed recorders. This is manipulated as quietly as possible, every effort being used to keep the Indians in an easy, happy frame of mind. The work is done chiefly with men between the ages of 55 and 80.

In some Indian songs the key is established (to use the musical phraseology) while in a lesser number of songs the relation of the tones to a keynote is less in evidence, or altogether absent. The descriptive analyses that follow such songs contain a statement that the signature indicates the pitch of certain tones but does not imply the existence of a key, in the musician's use of that term. The signature is a simpler manner of indicating the pitch than the use of sharps and flats, scattered throughout the melody.

The question may be asked whether the selection of a keynote is not a matter of education and therefore not germane to Indian songs. It has been shown that the Indian apparently has no musical system, and the designation of keynotes in his songs should not be understood as implying that he has such a system. We are accustomed to keynotes and a melody is more readily understood if we refer its tones to one basic tone. Moreover, the use of a fundamental and its upper partials as the framework of an Indian melody seems to justify the designation of the fundamental as the keynote. In songs without such a framework the keynote is inferred from the tonal material, the final tone of the song, except in a very small number of instances, being the tone which we would consider the keynote in a melody of our own race, or else its third or fifth. Thus if a song contains the tones D, E, F sharp, G, B and C sharp, with D and F sharp as prominent accented tones and D as the final tone we seem justified in giving the transcription the signature of the key of D and analysing the song in that key. It will be observed that in the tone-material cited the fifth is absent; the same course would be followed if the seventh were omitted, provided the sequence of tones suggested D rather than G as keynote. In a typical melody having the upper partials of D as its framework the principal accented tones would be D, F sharp and A, but, in many melodies, these tones appear only at the opening or at the close, the remainder of the melody being in a free form.

Only 6 per cent of the Indian songs collectively analyzed (987 in number) contain all the tones of the diatonic major or minor scale. The five-toned scales (described below) constitute 32 per cent while the remainder of the songs contain from 3 to 7 tones in a wide variety of groups. Next to the largest group is that of songs containing only the tones of the major triad (fundamental and its simplest overtones) this group constituting 14 percent of the total number. Songs containing four tones are classified as based on a major or minor triad with one additional tone. Songs that contain five tones (apart from the accepted five-toned scales) or six tones are classified as lacking certain tones of the complete octave. The largest of these groups are those in which the seventh is lacking, these groups constituting 18 percent of the total. The percentage of songs containing six tones of the octave is not large enough, in the writer's opinion, to justify the use of the term "six-toned scale." In the matter of five-toned scales, the writer has adopted the designation used by Helmholtz, giving no consideration to songs omitting tones other than the fourth and seventh of the major diatonic octave. This is the familiar series of tones represented by the black keys of a piano. In the designation by Helmholtz, the first five-toned scale (if thus played on a piano) had C sharp as its keynote, the second and fourth have D sharp and F sharp respectively, the third has G sharp and the fifth has A sharp as its keynote. The second five-toned scale, commonly called the minor pentatonic, occurs in 10 percent of the group already cited, while the fourth five-toned scale, commonly called the major pentatonic, appears as the basis of 20 percent of this group. The first five-toned scale forms the tone-material of 1 percent, and the fifth five-toned scale appears in only 2 of the 987 songs thus analysed. The keynote, in these as in the diatonic major and minor keys, is determined by the tones and their sequence, the keynote being that which would be so designated if the melody had originated in our own race.

The songs comprised in the foregoing analyses are those of the following tribes: Chippewa, Sioux, Ute, Mandan, Hidatsa and Papago.

The songs of the Pawnee, Yuma, Cocopa, Yaqui, Makah, Menominee and Winnebago, as well as songs of the Indians of British Columbia and Vancouver Island, and songs of the Tule Indians of Panama, are not included as yet in the large total, but each song has been analysed. In some instances the study of the tribe has not been completed and the material is not considered "closed" until this has been done. The Pawnee, Menominee and (probably) the Winnebago will be found similar in characteristics to the first five of the tribes in the collective analysis but interesting differences appear in the songs of the tribes living on the Mexican border and on the Northwest Coast. For example, a structure that seems peculiar to the Makah is small in compass, usually consisting of four tones with either the second or third of the compass as the most prominent and final tone. A comparison of the music of the several tribes is too large a subject for present consideration. About 1700 songs have been recorded, transcribed and analysed during the writer's study of Indian music for the Bureau of American Ethnology, covering a period of more than twenty years. Almost two hundred songs are awaiting transcription, and the large number of songs heard but not recorded has afforded valuable material for comparison.

In the method of analysis, already mentioned, the songs are classified under the following headings: (1) Tonality, determined by the distance of the third and sixth above the keynote, (2) Relation of the first tone to the keynote, (3) Relation of the last tone to the keynote, (4) Relation of the final tone to the compass of the song, (5) Number of tones (scale-degrees) comprised in song, (6) Tone material, (7) Accidentals, (8) Structure, melodic or harmonic, (9) First progression, upward or downward, (10) Total number of progressions, (11) Intervals in downward progression, and (12) Intervals in upward progression. This is followed by a similar tabulation of rhythmic characteristics. These bases of classification were devised for convenience. Consistently and steadily used they obviate all "tests by the ear," which lead to dangerous generalizations. They are a system of measurement in order that collective results can be determined. Nothing is claimed for them beyond the foregoing statements. In the songs of the Mexican border and the Northwest Coast there are a considerable number of songs now classified as "irregular." They are repeated accurately, by reliable singers, but they do not conform to the above system. Some of these contain a majority of the tones of the diatonic octave but do not end on the first, third, fifth or octave. Others are entirely free in

melodic form. Further study of this group may produce interesting results but at present there is no attempt to explain them.

It is often said that "Indian songs have a minor sound," but the collective table of 987 songs shows 53 percent having a major and 42 percent having a minor tonality, a majority of the remainder being "irregular," or lacking the third above the keynote, while 5 songs have two sections, one being major and the other being minor in tonality. In this table, 20 percent begin on the octave above the keynote, 10 percent on the twelfth, 30 percent on the fifth, and 10 percent on the keynote. The songs ending on the keynote comprise 54 percent, on the fifth 33 percent, and on the third 10 percent, showing the feeling for the upper partials already mentioned.

The impression of a "minor quality" in Indian songs may be explained by the frequency of the minor third which constitutes 30 percent of the descending intervals and 25 per cent of the ascending intervals in the total of 987 songs. The only interval exceeding this in frequency is the whole tone which, with a semitone, often comprises a minor third with a "passing tone." The total number of intervals in these songs is 26,777 and the average size of an interval is 3.08 semitones. As a minor third contains 3 semitones it will be seen that the average size of an interval is approximately a minor third. The difference between the tribes is very slight in this respect.

There is a general impression that Indian songs are descending in trend. This is shown by the fact that 60 percent of the 26,777 intervals in the songs under collective analysis are descending intervals. Sixty-one percent of the songs begin with a downward progression, and in 74 percent of the songs the last tone is the lowest tone of the compass. It is particularly interesting to note this descending trend since the tone material of Indian songs has been shown to be so closely connected with the ascending harmonic series. Occasionally an Indian sings the fundamental tone of this series softly before beginning to record his song, as though "getting his balance," but this does not occur with sufficient frequency to be considered important.

Mention should be made of the large number of songs that a good Indian singer has at his command. The writer has recorded more than eighty from some individuals and been assured that a good singer has several hundred songs held in his memory. In many ceremonies the insistence upon accuracy is so strict that a singer who makes a mistake in a song must pay a heavy fine and begin the song over again. Songs are learned by Indians visiting another tribe and accredited to that tribe when used. It is also customary to credit a song to its origin

within the tribe. Thus the songs belonging to a medicine man long dead are said to have been his property, and the songs in honor of warriors are kept by generations that have forgotten his deeds of valor.

The recording apparatus of the phonograph or dictaphone has made possible the preservation of Indian songs, but the opportunity for that work is rapidly passing away. The old songs are remembered correctly, with the information pertaining to them, by only the old men. It is possible to obtain old songs from men in middle life but they often do not know the meaning of the words and are uncertain of the information regarding the songs, beyond the fact that the songs belonged to the previous generation. In some instances I have recorded a song from an old man on one reservation and a middle-aged man on another reservation and found that the latter had smoothed out the interesting irregularities in the rhythm. The young Indians, now in Government Schools, have little interest in the old songs except as they occasionally learn an old melody in order to adapt it for use in a school band or orchestra. There will be no trace of the songs in imperishable stone for future archeologists to decipher. The songs given to human beings by the spirits of the night, the morning star, the dwarfs of the mountains, the birds of the air and the animals of the plain—these will have gone forever. The Indian of the present day does not hear these voices. He can only say, "My grandfather received this song in a dream."

SCIENTIFIC NOTES AND NEWS

At the celebration in honor of the Centenary of Marcelin Berthelot held in Paris on October 24, and several days following, the Washington Academy of Sciences was represented by Dr. W. E. TISDALE of the International Education Board, who on behalf of the ACADEMY presented an address at a formal meeting presided over by Monsieur Doumergue, President of the French Republic.

On the occasion of his seventieth birthday, August 13, 1927; in recognition of his forty years of research work in Tropical America, the honorary degree of Doctor of Natural Sciences was conferred upon H. PITTIER by the University of Lausanne, Switzerland, "to distinguish the merits of his work concerning the natural history of Canton de Vaud (Switzerland) and Latin America and to acknowledge his efforts in the promotion of colonial agriculture."

Am. Anthropologist, Vol. 30, No. 1, Jan.-March 1928

La Musique des Incas et ses Survivances. R. and M. D'HARCOURT. Paris: Librairie Orientaliste Paul Geuthner, 1925.

This impressive work of some 575 pages with an accompanying volume of plates gives the results of the study of ancient and modern popular music in the region which corresponds closely to the ancient empire of the Incas: Ecuador, Peru and part of Bolivia. The transcriptions of over two hundred songs are given, for the most part with the Indian words and the translation into French. A few are also given arranged to be played on the piano. The volume of plates contains some 275 photographs of ancient and modern musical instruments beautifully reproduced. Separate chapters are devoted to the various kinds of instruments; rattles, drums, xylophones, trumpets, pan's pipes, flutes and flageolets, whistles, ocarinas, and even stringed instruments. One long chapter, making up part two of the book discusses festivals and dances.

Part three gives a very interesting and complete discussion of the musical folk-lore of these people, a study of the modal character of the music, rhythms, forms of composition, the poetic text of the songs, personal notes on the singers themselves, with an account of the methods used in collecting these songs, ending with a chapter on the relations between the musical folk-lore of these Indians and that of the natives of North America and of Spain.

To try to find correspondences between the songs of the North American Indian and those of the South American Indian seems hopeless to one who has tried to find relations between the songs of adjacent tribes on this continent. There is as little in common between the rich, sonorous singing of the Hopi and the screaming falsetto of his neighbor the Navajo, as there is between the German songs and the songs of the Turk. It is as meaningless to speak of "Indian songs" as it is to speak of "European songs." Even as fundamental a matter as the modality can not safely be used to set up relations between different tribes and peoples. The authors seem to believe that the antiquity and authenticity of a song can be estimated, roughly at least, by the amount of its deviation from the pentatonic scale. They give an attempt at historic classification based principally on the modal structure of the songs. This classification, which they themselves warn us should not be taken rigorously, serves roughly to pick out the more recent from the more ancient of the songs. There are, of course, songs which can not be definitely assigned to one or the other of the various classes proposed, and the whole scheme seems a little untrustworthy in view of the world-

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wide occurrence of the pentatonic scale among peoples of no very great musical culture. It is nevertheless a serious attempt at a most difficult problem, especially difficult in this region where in spite of the isolation of the Indians in the high and remote parts of the mountains the influence of the Spaniards has been for centuries constantly at work modifying and adapting the native songs. The Catholic missionaries were psychologists enough not to attempt to root out the pagan songs. They brought them into the fold of the Church and made them do duty in Catholic worship, using words which are a mixture of Indian and Spanish. One of the most striking of these is the Hymn to the Eucharist: Kanmi Deos Kanki, of which the first verse with its translation runs:

Kanmi Dios Kanki	*Tu es Dieu*
Yurak hostia santa	*Blanche hostie sainte;*
Khonkkor sayaspam	*A genoux*
Čunka mučay kuiki	*Je t'adore dix fois*
Uyaril 'away	*Écoute-moi*
Apu Jesu-Cristo	*Seigneur Jésus-Christ,*
Dios wakča kuyak	*Dieu aimant le pauvre.*

These picturesque words are set to a stately and impressive theme; indeed, they are given two settings both of striking dignity and power. How much of the old pagan hymn remains in them is hard to guess.

It is difficult not to ascribe to the Indian the same reaction to musical forms that we ourselves experience. Thus one is drawn irresistibly to the feeling that major and minor modes affect him as they do us. Thus in commenting on the preponderance of minor songs among the Indians (something like 65%) the authors say

> La tristesse de l'âme indienne y a trouvé son moyen d'expression le plus profond.

But 65% does not seem like an "imposante majorité." Moreover, many of the major songs are set to plaintive words and many of the minor songs appear with delightfully saucy and amusing verses. But again, it is difficult to draw any reliable conclusions since the songs are no doubt much older than the words that are given to them here. The reviewer has never been able to find any evidence of an interpretation of the minor mode as a sad mode among the tribes of this continent. In all the collections appear many songs of a sad and plaintive nature set to what seems to the white man's ear gay and hopeful themes, and one can also find many humorous songs and

songs of laughter and derision set to what seem to us mournful and plaintive airs.

Compared with the songs of the North American Indians these songs seem quite sophisticated. There is a strong Spanish flavor even in the most primitive of them. The phrases are for the most part well marked. The amorphous character of a typical Sioux or Chippewa song never appears among them. There is no reason to doubt that the transcriptions are accurately and carefully made. The phonographic records, unfortunately for good and sufficient reasons, were not preserved. The blanks were too difficult and too expensive to obtain and too inconvenient to transport. This is a great pity, of course, but the authors were in the habit of making a careful study of the records on the evening of the same day that they were collected and any ambiguities were cleared up before they were erased. The authors are evidently responsible musicians and gifted with an unusual ability in making transcriptions. Their plan of writing each phrase by itself uses up a good deal of room on the page, but certainly makes for clearness. To the reviewer, phrasing seems to be the most important matter to emphasize in a song. Certain tribes whose songs he has studied such as the Miwok and the Pomo seem to have an extraordinary feeling for phrase and answering phrase, a feeling which appears to be very rudimentary among others, such as the Yurok and the Hopi. This feature of Indian song seems much more promising as a means of classification than modality.

DERRICK NORMAN LEHMER

Tribes and Temples. FRANS BLOM and OLIVER LA FARGE. Tulane University, New Orleans, 1926. 2 vols., 536 pp., 7 pls., 5 maps, 274 figs.

This is "a record of the expedition to middle America conducted by the Tulane University of Louisiana in 1926," and is dedicated to Maudslay. For some reason no author's name is given on the title page. Blom is responsible for the sections on archaeology (p. 1) and apparently on narrative (p. 189), La Farge for those on ethnology and language. La Farge's portions seem to be chapter 4 (San Martin Pajapan); pp. 141–145 of chapter 5; chapter 15 (Bachajon, northern Tzeltal); perhaps parts of chapter 16 (highland Tzeltal); and appendices 1 to 6, which consist of Populuca, Yocotan, Chontal, Tzeltal, Chaneabal, and Jacalteca vocabularies, Yocotan grammar, and Yocotan and Tzeltal texts.

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WHAT INTERVALS DO INDIANS SING?

By FRANCES DENSMORE

THE study of Indian music is inseparable from a study of Indian customs and culture. If we were to base conclusions upon the phonograph record of an Indian song without taking these into consideration we should become involved in a maze of speculation. In taking this attitude toward Indian music we are following the custom prevailing in our own race. A musical performance by one of our own musicians is judged by our knowledge of the performer. A professional violinist is allowed to play a trifle sharp in order to add to the brilliance of his work, but when an amateur plays off the key he is condemned.

Everyone who hears Indians singing will admit that they produce sounds with gradations of pitch smaller than those of our musical system, and the most important decision to be made by a student of Indian music is concerning the importance to be attached to these small gradations of pitch. If they are based upon intelligence, the study becomes one of determining and classifying what are commonly called fractional tones, and, from that classification, finding out and formulating the musical system of which they are a part. If, however, these small gradations of pitch are merely the chance happenings of an individual's peculiarity or pitch uncertainty the student is free to devote his attention to other features of the performance. Important to this decision is a recognition of the primitive manner of tone production used by the Indians. This is entirely different from the tone production used by singers of our own race.

Let us assume, as a working hypothesis, that the small gradations of pitch in Indian singing are part of a musical system more complex than our own. We should then expect that the Indians would be able to explain this system as the ancient Greeks demonstrated the divisions of the monochord. But the Indians, so far as known, cannot give any explanation for the melodic form of their songs. They say that the old songs were

"received in dreams," and that songs "come to them" at the present time, or are composed by two or more persons working together, patching together pleasing phrases and experimenting until all are satisfied.

It is impossible for us to imagine an intelligent musical system without a graphic record or representation but the Indians had no way of recording their songs. Out of the air, in some mysterious manner, the Indian believed that he received his personal song and he kept it locked in his own mind in order to use it for his personal benefit in some hour of need or danger. Music was not a social accomplishment, neither was it an art in our use of that term. Indians did not sing for approval. The test of a song was its power to bring rain, locate the enemy, heal the sick, or enable a man to win a game. A song was like a magic arrow, not a triumph of the intellect.

If the Indian has an ability to produce at will and with ease such small intervals of pitch that our musical system does not use them—such as eighths, sixteenths, or still smaller fractions of a tone—is it not reasonable to suppose that he will recognize such intervals when he hears them? In order to test the pitch discrimination of Indians the writer took with her, to Indian reservations, a set of 11 standardized tuning forks, one of which gave the fundamental tone of a series (a′ 435 vibrations, international pitch) while the other forks produced respectively 1/2, 2, 3, 4, 5, 8, 12, 17, 23, and 30 vibrations above the fundamental. These forks were kindly lent for the experiment by Dr. C. E. Seashore, Dean of the Graduate College, State University of Iowa, who also examined the tabulated result of the test. He expressed the opinion that:

> The abilities here shown are about as good as one would find among the average American whites under similar conditions.

The ear of the Indian is trained to hear sounds which we do not notice but this test does not indicate that he has a superior perception of difference in the pitch of tones. The method of the test was to sound two forks consecutively, ask which was the higher, and record the reply.

Further, a complex musical system, including very small fractions of tones, would naturally arise from men of logical minds, whose reasoning was highly developed along other material lines. The Indians living in North America did not share the high development of those living in Central America and certain parts of South America. These Indians were chiefly a nomadic people among whom the difficulty of securing food and safety from enemies was the paramount interest. A man's reasoning led to the securing of supernatural help rather than toward the making of accurate deductions from material facts. The following incident shows the manner of reasoning of a Sioux Indian who was highly respected by his people. He found a globular stone on top of a hill, similar to stones that were abundant in a river not far distant. On being asked how he explained the shape of the stone he said it had become globular by looking at the sun, since "things that look at each other for a long time will come to have a resemblance." He carried this stone on his person and attributed the good health of himself and his family to its presence. In order to stimulate the supposedly magic power of the stone he sang a song, according to the custom of the Indians when seeking results by supernatural means.

The extreme individuality of the Indian should be taken into consideration. There was no common knowledge shared by all members of a tribe except the proper remedies for minor ills. The remedies for major illnesses were the property of medicine men who received them in dreams and kept the identity of a medicinal plant so secret that they would not give the plant a name. A man taught his pupil by showing him the plant, and both disguised it in preparation so that no one would guess their secret. Songs were not a matter of common knowledge, except the songs of social dances. How then could every singer be trained to accuracy in the production of intervals so small that our cultivated singers would hesitate to undertake them? If there was a custom with no foundation in logic, it must have been based upon arbitrary use, each man singing these minute intervals because he was trained to do so. In that event the Indians would have been obliged to practise the art of singing, and no explorer or

ethnologist has claimed that he found Indians practising small intervals as a matter of technical skill. It is true that Indians who visit a strange locality or tribe are anxious to bring back new songs and teach them to their friends, and a leader of the singing may teach songs to his assistants, but this learning of new songs is different from the practising that would be necessary to produce, consciously and accurately, the small intervals that are heard in the singing of Indians.

Miss Alice C. Fletcher left the following remarkably clear observation on this subject:

> During the earlier years of my studies, I was, with other observers, inclined to believe in the theory of a musical scale, in which the interval of a tone was divided into many parts: but, for many years now past, having become more familiar with the Indian's mode of thought and feeling concerning music, and as the result of careful investigation of hundreds of songs which I have transcribed, I have been led to account for his peculiar intonations in other ways than in the use of a minutely divided scale. . . . . To convey Indian mannerism would be impossible, and any attempt to do so by a fanciful notation would end in caricature. These mannerisms do not form an integral part of the Indian's music, he is unconscious of them. It is easy to be caught in the meshes of these external peculiarities of a strange people, but if one would hear Indian music and understand it, one must ignore as he does his manner of singing.[1]

During the first year of the writer's work with a recording phonograph for the Bureau of American Ethnology an experiment was made which has an important bearing on this subject. Two phonographs were placed opposite each other in such a position that the ends of the recording horns were together. A typical record of a Sioux song was played on one phonograph and recorded on the other, this in turn being recorded until the sixth duplication of the original record was obtained. This was much softer than the original record but the tones were those of the diatonic scale sung with reasonable accuracy. The duplication had eliminated the by-tones, leaving a kernel of tone which had been obscured by the Indian's peculiar manner of rendition.

In the transcription of about 1700 songs the writer has found the intonation reasonably accurate on the upper partials of a

[1] Appendix to A Study of Omaha Indian Music. Peabody Mus. Am. Arch. Ethn., 1893.

fundamental, these tones forming the framework of a large majority of Indian songs. Hundreds of songs with the same characteristics were heard but not recorded. The term "accuracy" is here used to indicate correspondence with the diatonic scale, not conformity to a standard which is present in the mind of the Indian. The ordinary musical notation is used by the writer in transcribing Indian songs, not with a claim that the Indians have a knowledge of our musical system but because this notation is familiar and therefore can present a large amount of material for observation. It represents the intonation on the upper partials of a fundamental tone with as much accuracy as in the performance of a large majority of our own singers. The intonation on other intervals varies, the major second (whole tone) being sung with reasonable accuracy more frequently than the minor third and the minor second (semitone). If the Indian has a consciousness of very small intervals it is reasonable to suppose that he would use them in his songs, but the semitone rarely occurs and is sung with great variability. An Indian finds it difficult to sing a succession of tones on the same pitch, such a series showing upward and downward variations in pitch. It is the writer's custom to indicate slight deviations from pitch by a plus or minus sign above a note, provided these deviations are persistent in all renditions of the song. One singer among the hundreds whose songs have been studied, was heard to split a descending semitone into two intervals of practically the same size. This was done a few times in the group of almost 30 songs recorded by this singer and might be regarded as "singing quarter-tones" except that the peculiarity did not appear elsewhere in his work. The number of these occurrences was negligible in comparison with the number of intervals which corresponded with diatonic pitch in a reasonable degree of accuracy. The observation stands as an interesting peculiarity of one man's singing of a descending semitone, not as an indication of a musical system containing quarter-tones.

Three queries will be offered in conclusion:

> (1) Why is the interval of a tone offered as a basis for the measurement of pitch in Indian singing by those who claim that the Indian has a scale composed of small intervals? The tone is an artificial standard in whatever

manner it is used. If a new basis of measurement is to be introduced it should have, as its unit, the smallest interval present in Indian singing, the larger intervals being designated as multiples of this unit, similar to the fifth, octave and twelfth in our own musical system. For this it would be necessary to determine the number of vibrations in the smallest interval present in the Indian's vocal performances. This would be a stupendous task and almost as difficult as to analyze the sound produced by a wild animal.

(2) What would be the result if a stranger came among us and tried to construct our musical system by making phonograph records of the performances of our singers, without the accompaniment to which they are accustomed?

(3) Is there not an element of physiology in the production of exact pitch, especially on repeated tones? In transcribing a Winnebago song the writer recently found the syllables *mah-nee-no* sung slowly, each with the same length, on a tone that was rather low in the compass of the singer's voice. The first syllable was the lowest, the second was the highest, and the third was between the two, yet the differences in pitch were very slight. Apparently these differences were due to the "placing" of the vowels. Repeat the syllables yourself, singing them in slow, even tones on a pitch that is rather low for your voice and see if you give them with absolutely uniform pitch. In the Winnebago song these syllables occurred 12 times in a song with 25 measures.

The Indian usually sings with an accompaniment of a drum or rattle, never with a tuned instrument. The white musician seldom sings without the support of a tuned instrument, yet our singers are far from absolute in their intonation. We ought to allow the Indian a little liberty in the pitch of his tones, without assuming that he has a musical system of intervals so small that they are beyond our ken and so intricate that even the Indian himself has no knowledge of it. The Indian was a master of rhythm but a majority of his old, native melodies are simple in their progressions.

RED WING, MINNESOTA

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PECULIARITIES IN THE SINGING OF THE AMERICAN INDIANS

By FRANCES DENSMORE

TO THE average listener all Indian singing is peculiar. To an experienced student of the subject there are many sorts of peculiarities which may be grouped as racial (or primitive), regional, personal, and those connected with certain classes of songs. Each is often modified by others, and there are contributing circumstances which affect them all. One such circumstance is the fact that phonograph records of single voices are the basis of study, although solo singing without a loud accompaniment is contrary to Indian custom. The exceptions are apart from present consideration. We hear the peculiarities of Indian singing at gatherings on the reservations, and this observation is an important part of the study, but phonograph records, as indicated, form the basis of actual study because they can be played over and over without possibility of variation in the performance. Numerous repetitions of the song are also available for comparison, as well as renditions of the song by other singers.

The following observations are presented with a realization that they do not include all the peculiarities of Indian singing. They are those which recur to the writer after an intensive study covering more than twenty-two years and a wide range of tribes.

1. Racial peculiarities.—The principal thing the Indian does in his singing which the white man does not do is to separate the tones without the use of words. The Swiss yodeler has a singing technic without words, and the lilting tra-la-la in certain classes of songs are isolated examples. We are rather a wordy race, hence we are getting where words mean nothing. They have been overworked until there is no life in them, as in the "I-love-you" songs of the vaudeville stage. There is very little poetry of value in the words of our songs, as we have gradually separated poetry and song, but in the mind and custom of the Indian they are one. When he uses words in a song they are important, but he is also able to do without them. An Indian said, "There are no words in that song—it is just *singing*." In many instances there are a few words in the middle of a song, the rest of the melody containing meaningless syllables. In a minority of such songs the vocables can be recognized and written out as *ho-ho* or *hi-hi*, but generally it is impossible to represent the vocalization by letters. The Indian is able to separate his tones neatly and precisely, with no recognizable vowel or consonant sound. On one occasion the writer sang an Indian

song for identification and the Indian said, "The tune is right, but you cannot sing it like an Indian because you have not an Indian throat."

A recent article on the American Negro[1] is quoted as follows by *Science*:

> The only respect in which Negroes show a racial advantage in music over whites is in vocal ability. This is due to anatomical differences in the vocal organs of the two races.

This statement is based upon a "scientific test" in connection with an intensive study of the Negro. No similar study of the Indian has been undertaken, so that it is unsafe to express an opinion in the matter. We only know that the Indian has a singing technic which we do not possess, many tribes of Indians singing with teeth and lips slightly parted and separating the tone by a contraction of the glottis.

A second racial peculiarity is the Indian custom of spacing the accents unevenly in song. The spacing is not always determined by the words, as instances have been noted in which the words are accented differently in speaking and singing. When transcribed, the uneven spacing is shown by uneven lengths of measures. The writer finds no secondary accents in Indian songs except that 6/8 time is distinct from 3/4 time, the former being double and the latter being triple in its feeling. There is no secondary accent in 5/8 and 7/8 measures, nor is there a secondary accent in measures transcribed in 4/4 time, a meter which occurs very rarely in songs recorded by the writer. These accents occur uniformly in two to ten renditions of a song. The writer recalls only two songs which wholly or in part lacked accent altogether. In addition to the normal rhythmic accents there occasionally are sharp accents of certain tones. These sometimes fall on tones other than those of the first count of a measure, being sung with emphasis but not interfering with the regular rhythm of the song.

Another racial peculiarity is the ability to dispense with rests. A difference is seen in singers, the old Indians not requiring a pause for breath during a long melody while Indians of the present generation introduce eighth-note rests when needed for taking breath. In a genuine Indian song the rest, when it occurs, is intentional and appears at the same point in every rendition, but the absence of a breathing-space does not inconvenience the singer. Tribes differ in this respect.

A further peculiarity, so general that it may be considered racial, is a pulsing of the voice on prolonged tones. Thus it is sometimes uncertain

[1] Yale S. Nathanson of the department of psychology of the University of Pennsylvania, in the Annals of the American Academy of Political and Social Science, 1928, a volume devoted to a study of the American Negro.

whether a tone shall be transcribed as a quarter note or as a triplet of eighths. It is the writer's opinion that pulsations equivalent to four sixteenth notes occur less frequently than those equivalent to a triplet of eighths. This is by no means a universal custom in all classes of songs, but is frequently noted and does not seem limited to any region. The singing voice of the Indian is less like the speaking voice than in our own race, and this pulsation is a part of the difference.

A distinct *glissando* is not a general characteristic of Indian singing but is sometimes used intentionally. This, like a *rubato*, is sometimes found in several songs of the same class. A *vibrato* and a falsetto tone are not universal and are considered later as personal mannerisms. Miss Alice C. Fletcher states:

> These mannerisms do not form an integral part of the Indian's music, he is unconscious of them . . . . if one would hear Indian music and understand it, one must ignore as he does his manner of singing.[2]

The Indian does not associate a minor tonality with sadness, neither does he express joy or excitement by a rapid tempo and small count-divisions. An Indian was once asked whether songs of excitement in war were sung faster than other songs and he replied: "No. When we are excited we sing louder but not any faster." A restraint in tempo and rhythm has often been noted in songs of war, adding a dignity worthy of recognition.

There are standards of excellence in singing among the Indians, as in our own race. This was made a subject of special inquiry among the Chippewa and Sioux, a group of Sioux from five localities in South Dakota being questioned on their knowledge of Sioux standards. In their reply they placed mental qualifications above what we term technic.[3] Thus they stated that a good singer must be able to sing a song correctly after hearing it two or three times, he must have a retentive memory, giving him command of a large repertoire, and he must sing with a convincing quality of rendition, as one with authority. Observation has shown these to be standards in other tribes. More than eighty songs have been recorded by one singer without in the least exhausting his repertoire, and more than sixty have been obtained from other singers. Accuracy of repetition has been tested and found exact, both by the same and other singers, proving the integrity of a song. The writer has frequently been told of the teaching of

[2] Appendix to A Study of Omaha Indian Music, Peabody Mus. Am. Arch. Ethn., 1893.

[3] Teton Sioux Music by the writer, 58–62. A consideration of mannerisms, as well as a comparison between renditions of songs, is included in the descriptive analyses of songs in Chippewa Music, Chippewa Music II, Teton Sioux Music, Northern Ute Music, Mandan and Hidatsa Music, Papago Music, and Pawnee Music, by the writer.

songs to one man by another, but these are generally the songs of healing or for some other definite purpose. No mention has been made of technic in connection with this instruction, for which a very high price is often paid. Apart from this, the only mention of learning songs is that, in the singing for dances, the young men "sit with the singers at the drum and learn the songs in that way." They are allowed to pound on the drum with the others, and they sing softly until they learn the melodies. If a man has learned a song in another tribe, he may teach it to the other singers in the same manner, allowing them to sing with him until they learn the tune, pounding meantime on the drum or, in tribes that use a rattle, shaking the rattle as they gradually learn the song.

In a general consideration of Indian singing, mention should be made of the primitive ability to carry two rhythms and tempi at the same time. In many Indian songs the tempo of the melody is slightly faster or slower than that of the drum, and the voice is in double time while the drum is in a triplet division. Frequently there is no ratio between the two tempi, unless we permit a node consisting of 40 or 50 measures, which would be absurd. For example, in a Chippewa song the tempo of the voice is ♩ = 100 and that of the drum is ♩ = 108, in another the tempo of the voice is ♩ = 104 and that of the drum is ♩ = 112, each being steadily maintained.[4] In these instances the rhythm of the drum is not unlike that of the voice, but in another Chippewa song the tempo of the voice is ♩ = 120, that of the drum is ♩ = 126, and the voice is chiefly in quarter and eighth notes while the drum is in a rhythm of three eighth notes to a quarter note,—a triplet rhythm with the second count of the triplet silent. It appears probable that the producing of two rhythms simultaneously is the first phase of development in music, and that rhythmic pleasure is more primitive than gratification by means of melody or technic in singing.

2. Regional peculiarities.—The musical instruments used by the Indians are determined by the available materials, and these in turn depend upon the environment. To some extent the manner of singing is also affected by the environment, particularly by the type of dwelling or other structure in which the songs are commonly sung. The Sioux and neighboring tribes sang chiefly under the dome of the sky, the accompanying instrument being a large drum, as buffalo hides were easily obtained and generous in size. There were many dancers, while the music was supplied by a comparatively small number of persons seated around the drum. Therefore it was necessary for the singers to use a loud tone, and in these tribes a "good singer" has a strained, forced voice of great penetrating quality.

[4] Chippewa Music, by the writer, nos. 81 and 88.

One of the greatest difficulties in recording songs in these tribes is in persuading the singers to restrain their voices within the recording capacity of a phonograph. They would like to sing in groups, pounding on a large pan, since a drum does not record.

The Algonquian tribes sing outdoors in many of their social dances but the meetings of the Midewiwin are held in a long lodge, usually having a frame of poles interlaced overhead. The accompanying drum is the type known as a water-drum, having a tone of great carrying quality but not loud when one is near it. Their songs, in meetings attended by the writer, are in a moderate voice, entirely different from the piercing quality of the Plains singers. Winnebago and Menomini dances have been attended in circular lodges, open at the sides and with a roof of boughs. The circle of dancers cannot be large as it is limited by the size of the lodge, and it is not necessary for the men at the drum to force their voices. Sometimes fifteen men are seen at the drum and only about thirty persons in the circle of dancers.

The Mandan and Pawnee lived in earth lodges and held their gatherings in large structures of this type. The manner of tone production, at gatherings attended by the writer, was different from that of the white race and also different from that of the Plains tribes, so often designated as "typical Indian singing." Tribes of southern Arizona, living in adobe houses, have very agreeable singing voices and, when heard in groups in open air dances, they use a gentle tone and accompany their songs by a gourd rattle or by pounding on a woven basket, inverted on the ground. Tribes of the Northwest Coast sing in the open air at their social gatherings, but formerly sang in long wooden houses. They pound upon planks and formerly used huge wooden boxes as rattles, tipping them back and forth so that the stones inside them rolled to one end or the other. Their large drums were formerly boxes made of wood and kicked by men sitting upon them, though small drums with heads of hide were used by individual singers. Their small rattles are wood or made of pecten shells. More than two hundred songs of these Indians were recorded by the writer, and their singing was heard at several large gatherings. The voices of the men are resonant and those of the younger women have a piercing quality, but neither is like the voice of the Plains Indian.

A study of Pueblo music in the field is made impossible to the writer by an altitude inhibition, but a study of Acoma songs was made from Indians in Washington, D. C., twenty-seven such songs being recorded for the writer and more than sixty songs, recorded for the Chief of the Bureau of American Ethnology, being studied. About forty of the Acoma

songs were transcribed. In many of them a gradual raising or lowering of pitch was noted. This has not been found in other tribes studied by the writer except as isolated instances. The raising of pitch was sometimes about half a tone, and in many songs was a tone and a half. As the songs were all recorded by the same singer there was no opportunity for comparison, but the shifting pitch cannot be regarded as a personal mannerism since others have attached great importance to it. Miss Helen H. Roberts calls attention to this in two songs of the Copper River Eskimo,[5] changing the pitch of the transcription to correspond to the tones produced by the singer. In the Acoma transcriptions the writer has used the same signature throughout, believing the change of pitch to be incidental and probably not within the consciousness of the singer. Moreover, an abrupt change of signature from C to D flat does not show the pitch of the transitional tones, each of which is slightly altered as the general pitch of the song ascends. In a review of this work Mr. George Herzog states[6]

> One fact is beyond doubt, that the *way* Eskimos and Indians sing is identical; the general style of Indian singing throughout the whole continent, as Dr. von Hornbostel states, is shared by the Eskimo. Style of singing is an exceedingly important and significant factor in primitive music.

George Herzog, in his article on the music of the Yuma, mentions several peculiarities which have been noted by the writer, including the introductory use of the rattle. He also states that

> The song is usually kept on the same pitch and in the same time, which contrasts with other areas where there is constant rise in pitch and increase in time.[7]

The latter does not correspond with the writer's observation. Any change in tempo is made clearly and abruptly—never as a gradual increase throughout a song.

It is impossible, within the scope of this article, to enumerate all the peculiarities of Indian singing, neither is it possible to group them accurately in the classes designated, as many peculiarities may properly be placed under more than one of these headings. Many northern tribes have a custom of shouting short phrases between renditions of a song or interpolating them in a song, such as "Dance faster," or "Sing louder." There

[5] Helen H. Roberts and D. Jenness, Songs of the Copper Eskimo. Reports of the Canadian Arctic Expedition, 1913–1918, vol. 14, (Ottawa) 1925. Songs 26 and 81.

[6] George Herzog, *Review of* Songs of Copper Eskimo *in* Journal of American Folklore, 39: 218–225, 1926.

[7] George Herzog, The Yuman Musical Style. Journal of American Folklore, 41: 191, 1928.

are various signals given by men at a drum. For example, in the Dream Dance the Menomini often give the drum a sharp, heavy stroke as a signal for the women to finish the song without the men, and sometimes the women sing softly, alone, four times during the repetitions of a song, after which the men finish it. A sharp stroke of the drum often signifies that the singing of a particular song will end with that rendition. The "Ki-yi" of women during a war or pleasure song is a northern, or perhaps more accurately, a northern and Plains custom. The Sioux have a peculiar custom of singing heard also in the Menomini Dream Dance, which was received from the Sioux. In this dance the women sing with hand or shawl held over the mouth and head bent forward, the sound being nasal and resembling a humming with lips closed. The giving of loud, sharp yells at the end of a song is a Plains custom, while the Algonquian tribes give the explosive syllables *ho ho ho* after songs of the Medicine Lodge. A flourish of the rattle, or tremolo beating of the drum are not common to all tribes and may be termed regional peculiarities, the former being heard in Arizona. In many Pawnee songs there is an increase of the drum tempo in the fourth or fifth measure, the resultant tempo being maintained throughout the song. Frequent changes of tempo were noted in the Acoma songs and in those of the Tule Indians of Panama, but such changes occur rarely in songs of the other tribes under observation. A connective phrase between repetitions of a song was not found in the Sioux and Chippewa, neither did it occur in songs of the Mandan, Hidatsa, and Ute, but it is of frequent occurrence in Pawnee songs. A monotone introduction characterized the recorded Acoma songs, and there are instances in many tribes of short introductory phrases that are not included in the repetitions of the song. The Yuma and Cocopa songs contain a three-period form in which the second period is short and higher in pitch than the first. This has not been found in any other tribe except the Acoma, in whose songs it is a striking characteristic. The old Yaqui songs are different from those of any other tribe. Mention may be made of a peculiar accompaniment recorded with Yuma game songs, consisting of a rhythmic grunt in long and short pulses like the beats of a drum. The hand clapping of the Makah, which forms a rhythmic accompaniment to the songs, has not been heard elsewhere.

The sixteenth note followed by a dotted eighth note, sometimes mentioned as characteristic of Indian music, has not been a marked feature of more than eighteen hundred songs transcribed and a much larger number heard or studied by the writer. It occurs sometimes, as in the music of the

white race, but not with sufficient frequency to be typical of the Indian race or of any particular region.

A peculiarity which is regional and also connected with a class of songs is the howl with which the Makah and Clayoquot precede songs connected with the killing of a whale. This howl consists of a tone prolonged to the length of several half notes in ordinary tempo, followed by a downward sliding of the voice for an interval of three or more tones, fading away into silence. This is different from the trailing downward of the voice in the Mandan ceremonial songs and the glissando occasionally heard in other tribes.

The voices of the northern Ute were robust and forceful but not so strident as the voices of the Sioux. Among these people the notched stick rattle, or rasping sticks, is a favorite accompaniment of dance songs, sometimes with an inverted basket as resonator and, in the Bear dance, with a resonator consisting of a piece of zinc over a trench dug in the ground. This dance is held in a large enclosure surrounded by a board fence.

More than 120 British Columbian songs were recorded at Chilliwack, B.C., but are from so many localities that regional peculiarities cannot safely be indicated.

3. Peculiarities of classes of songs.—In several instances these features are connected with the use or purpose of the song. For example many of the game songs in all tribes are explosive in style, with short phrases and more frequent rests than in other classes. In many tribes there are songs of grief in which the singer "cries as he sings," these being particularly frequent among the Pawnee. The love song of the Chippewa and Menomini is sung in an artificial manner, with a pinched, nasal quality of tone by which it can be recognized. The Menomini and Winnebago say these songs are in imitation of the flute. The Pawnee also state that love songs imitate the flute. Many of the songs connected with stories about animals contain some characteristic of the animal, a song of the bear moving heavily while one about the gopher is a lively melody. A sliding tone is employed in the lullabys of all the tribes under observation, this being a gentle glissando unlike that of the wailing songs. It appears that the natural crooning of mothers to little children gradually took the form of a definite remembered melody and that the two customs overlap, the sliding tone being continued after the melody is repeated with reasonable accuracy.

The songs of the best "doctors" when treating the sick were sung softly, the aim being to put the patient to sleep. In contrast were the noisy songs of the jugglers or shamans, who shook rattles, jumped about, and startled the sick person. The Papago believe that all diseases are

caused by spirit birds or animals or by the spirits of the dead, each imparting songs to be used in the cure of the disease. There is a prescribed manner for many of these songs. For example, those of the rattlesnake medicine and those received from spirits of the dead were sung "with a certain degree of loudness", while the songs of the horned-toad medicine were sung more softly and with a drawling tone. In other instances the singer said, "The song is always sung in this way," recording it in that manner.

In the Morning Star ceremony of the Pawnee a peculiar manner of beginning the song suggested an attempt at polyphony. The leader sang three measures and then sustained a tone while two or three voices repeated what he had sung, after which all the singers joined in the song. In the Yuma cremation ceremony, witnessed in 1921, there were four "stops" in the ceremonial songs. Mention has been made of the downward trailing of the voice after recorded songs of a Mandan ceremony. The songs of the Chippewa and Menomini Medicine Lodge are followed by the explosive syllables *Wa hi hi hi*, or *Ho ho ho*, suggesting the "shooting with spirit power" which forms part of the ceremony. The words of many of these songs are fragmentary, so that the song will not be understood by the uninitiated.

Many other examples might be given, but the foregoing is sufficient to show that such mannerisms exist.

4. Personal peculiarities.—An interesting mannerism of Young Doctor, a Makah singer, consisted in the use of the labial *m-m-m* in portions of his songs, this being sung with lips closed. This occurred in songs learned by him from a medicine-man named Santiano who died many years ago. Occasionally a singer is found who has a habit of attacking high tones by an upward sliding of the voice, or who loses his pitch on repeated tones, or does not sing a semitone with any degree of accuracy. These are regarded by the writer as mannerisms similar to those of singers in our own race. Some singers use a more throaty tone than others so that it is more difficult to recognize the count-divisions of their songs. A Papago medicine-man disguised the words of his personal songs so that others could not learn and use them.

According to a certain Chippewa singer, he had discovered as a young man that he could give a vibrato tone, and had cultivated this ability. A similar instance was noted in North Dakota, where a vibrato is admired and its use considered a mark of excellence. In this connection it is interesting to note that the vibration probably increases the carrying power of

the voice, which is desirable in outdoor singing. A falsetto tone is rarely heard but was noted at Red Lake, Minnesota.

To one accustomed to Indian singing there are peculiarities in almost every voice, like the individuality of speaking voices, but these are not important to the general subject of Indian music, neither is it possible to describe them or to show them in notation.

Emphasis is here placed upon the fact that no musician learns entirely by rote, and that the Indians, as a race, are highly individualized. Vocal technic is not standardized in our own race, and we can scarcely expect to find uniformity in the manner of singing by American Indians. The correct form of a song is established and a good singer does not deviate from that form, but he may have personal mannerisms in his singing. The study of Indian music is the study of a primitive expression by men of strong individuality. There are limited attempts at discrimination in the manner of performing various classes of songs but the Indians appear to have been without a formulated system of either composition or technic in their songs.

RED WING,
MINNESOTA

it, inclosing photographs. The following is an extract from his reply:

"'I notice in the forehead a hole which is found in many of the surface faces of stone on the beach. I have in my collection just such an image. It is made of a gray sandstone; is about 10 inches high; has a low forehead, just like your image, and has also one or two holes made in the stone before it was fashioned into an image and while it was immersed at high tide on the beach. It was made at Neah bay by an Indian fisherman after the death of a native, and taken, in his place, in the canoe to the fishing grounds. Here it was lowered by a rope into the water, and was supposed to have "power" to attract fish and bring luck. I could not find that it had any other use, or that it was used in worship, or represented anything more than what we know as the dead fisherman's *tamanous* or luck. It is very similar in appearance to yours, and I suggest a similar origin.'"

This statement by Judge Wickersham, who is widely known as a close observing archeologist, is very interesting.

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GEOGRAPHICAL DISTRIBUTION OF THE MUSICAL BOW

OTIS T. MASON

Mr Saville's note in the *Anthropologist* for August, describing the "hool," a musical instrument played by the Mayas, at Loltun, in Yucatan, adds another area to the distribution of the "musical bow." About five years ago a native Zulu negro came into my office, having in his hand the instrument described below as No. 95201 in the National Museum. He played upon it by holding the bow in his left hand and spreading his capacious mouth on the back of the lower limb. He had in his right hand a piece of twisted wire, and produced most weird and entertaining music by striking on the string therewith and at the same time changing the volumes of the buccal cavity. The apparatus interested me so much that is was bought for the musical collection and is now among our treasures.

Mr E. H. Hawley, who has charge of the musical collection in the Museum and who has given a great deal of time to studying it, furnishes me with the following material describing "musical

bows" that have come under his knowledge, some of which are in the National collection. The native name and the description of the instruments are taken from Mr Hawley's notes.

Zulu (*Samuius*). A short, flat, wide bow with one string of steel wire, gut, or vegetal fiber. In the specimen here described the steel string is rapidly struck with a double and twisted steel wire while the back of the bow is held against the open mouth, which acts as a resonator. The tones are varied by changing the capacity of the mouth. A variety of notes can be produced by this means. (Cat. No. 95201, U. S. N. M.)

Zulu (*Gubo*). Bow not over two feet long; string played by placing a loose reed against it, resting the other end against the body, and striking the string with a slender reed.

Angola (*Hunga*). Bow with gourd resonator open like a bell tied to its back. The tunes are varied by the amount of opening between the player's body and the gourd and by moving it over different parts of the stomach. The string is held between the finger and the thumb and beaten with a slender cane. (Cat. No. 151,140, U. S. N. M.)

Angola, Africa (*N'Kungo*). Bow a curved whip; string a plant fiber, with a loop tied around both string and bow. Struck with a small stick.

Damaras, Africa. Bow same as one used in war or the chase. A loop of hide or string is passed around both bow and string and drawn tight, acting as a bridge near the middle, producing two sounds. The end of the bow is held between the teeth, and the string is struck with a small stick.

Hottentot (*Gom-gom*). A bow with a single string. This string is cut near one end and the flattened barrel of a quill tied to join the two pieces. Sometimes the quill is replaced by a piece of a cocoanut shell. The quill or shell is held against the lips of the player, something like a comb covered with thin paper. The player sits down, grasping the bow near its middle with his right hand; at the same time one finger of his hand is placed in his ear, the other in his nostril, and with a stick 5 or 6 inches long in his left hand he strikes the bow-string in several places. The sound produced is soft and low. Five notes can be effected. Between the fundamental tone and its octave there are three intervals. This instrument is also called "Gorah" or "Goura" by the Bushman, and "Joumjoum" when played by the women.

Mashonaland, Africa (*Wedsa*). Similar to the bow of the chase or war. To it is tied a gourd resonator, which is held against the body while the string is struck with a stick.

Mozambique (*Bobre*). A bow with a single string and a gourd tied to the back of the bow as a resonator, struck with a drumstick, on the head of which is a rag enclosing some seeds, forming a rattle. The specimen in the National Museum (Cat. No. 94661) has a round stick for the bow 80 inches long; the gourd resonator has a diameter of 4¾ inches and a height of 4 inches. The gourd has an opening at its lower end, which is held against the naked body of the player. The sound produced is somewhat modified by varying the opening between the lower edge of the gourd and the player's body.

Lake regions, Africa (*Kinada*). Small bow with one string and a gourd resonator tied to it; held in the left hand and struck with a stick in the right. Sometimes the bow passed through the gourd.

Madagascar (*Zedzi lava*). Bow, a cylindrical stick, to which is tied two-thirds of a gourd for a resonator; string, a three ply cord of vegetable fiber; bow held in left hand and the open part of the gourd pressed against the player's chest. In his right hand is held a small rattle of palm leaf; also a slender stalk of split cane, with which he strikes the string, its note blending with the sound of the rattle.

New Britain (*A-Pagola*). Has two strings, one of which is bent down almost to the bow and held by a loop of cord. It is tuned by moving this loop to or from the middle. The end of the bow is held by the mouth, which acts as a resonator. The strings are beaten by a stick in the right hand, the left stopping the strings. A woman's instrument.

New Guinea (*Pagola*). The bow, strung, is held partly by the mouth, the string being pressed by the thumb of the right hand and struck with a stick in the left. Played by women only.

Florida island, 9 S., 160 E. (*Kolove*). A small musical bow struck with a stick. One end of the bow is held by the teeth to reënforce the sound.

Pentecost island, 16 S., 128 E. (*Vuhudendung*). A small flat, thin bow of wood. The string passes from a hole near one end to a stud or spur formed on the other. It is held by the teeth and the string struck with a double stick.

Interior of Brazil (*Umcunga*). Bow of rattan, string stretched from one end to about two-thirds its length and tied. Beaten with a small stick, the bow being held against the throat or vocal cords.

Tule, California (*Mawahellis*). A tule reed with a longitudinal half section of the upper joint removed and a hole made in the lower end for a vertical tuning peg. String of gut. It is not known how it is played. (Cat. No. 19, 87 U. S. Nat. Museum, Section Music.)

Pueblo, New Mexico (*Thlin-thli-no-me*). A round stick with a rude tuning peg through one end. One string, supposed to be struck with a small stick. (Cat. No. 48089, U. S. Nat. Museum.)

After looking over the musical collection of the United States National Museum and such literature as has been collected by the Bureau of American Ethnology, I have come to the conclusion that stringed musical instruments were not known to any of the aborigines of the Western Hemisphere before Columbus. Those who have read my paper on "The Introduction of the Iron Age into America" will remember that attention is there called to the very early intrusion of African arts into the Latin-American areas. In one case we have a musical instrument imported by negro slaves given to the Indians with its native African name and abandoned by the negroes themselves.

BOOK REVIEWS

Die Göttergestalten der Mayahandschriften. Ein mythologisches Kulturbild aus dem alten Amerika. Von Dr Paul Schellhas. Dresden: Richard Bertling, 1897. 8°, 34 pp., 2 pl., 75 figs.

Eleven years ago Dr Schellhas, recognizing the convenience it would be to students of the Maya codices to have a provisional nomenclature of the figures of the gods in these writings, suggested the adoption of an algebraic method. He separated the figures represented in these codices into types and designated them by letters, *A*, *B*, *C*, *D*, etc. This method was still further elaborated in an article on the forms of the gods depicted in Maya codices, published in 1892. He has now brought the subject up to date in a neat pamphlet, which every one interested in Maya pictography should carefully study.

Am. Anthrop. XI, 3. March 1898

~~of which quite a number of dialects have been made known during the last twenty years, especially by Lafone. The Spanish-Mataco vocabulary covers pages 172 to 197, followed by its Mataco-Spanish complement, with some dialogues and stories.~~

~~A. S. Gatschet.~~

Geographical Distribution of the Musical Bow.—Prof. Otis T. Mason's article on the musical bow (*American Anthropologist*, vol. x, No. 11) induces me to add a few remarks.

Another area to the distribution of the musical bow is found in Patagonia. In August, 1896, I had the opportunity to meet at the La Plata Museum a few Indians from western central Patagonia. One of them, a youth of mixed Tehuelche and Araucanian blood, had a curious musical instrument, which hitherto I had never seen. It consisted of a very simple wooden bow, about 30 cm. long, with a single string made of a tuft of horse hair. When the Indian played upon the instrument one end of the bow was held between the teeth, the other end was grasped with the left hand. The string was struck with one of the long bones of the condor, in a manner similar to the use of a fiddle stick, and which was held with the right hand. See the accompanying figure.



Patagonian playing the Koh'-lo

The tune produced, although weird and melancholy, was not unpleasing. It had a peculiarly wild charm, characteristic of the lonely plains and silent lakes of western Patagonia. This instrument is called *koh'lo* in Tehuelche, which name, it is curious to state, has a certain resemblance to the Maya name for the musical bow, *hool*, and the name *kolove*, given by the natives of Florida, in the Solomon islands, to the same instrument.

This *koh'lo* was bought from the Indian for the La Plata Museum, where it is now kept in the ethnographical section of that institution.

As to Professor Mason's opinion "that stringed musical instruments were not known to any of the aborigines of the Western Hemisphere before Columbus," I cannot accept it under the present evidence. I think, on the contrary, that the musical bow in its various forms is a primitive and therefore very old instrument, not only in America but all over the world, wherever it is found. I think the invention originated in a number of localities remote from one another, and that it did not necessarily spring from one center.

Professor Mason does not mention Hindustan as an area where the musical bow is found. I will therefore state that according to a great authority on music, Rajah Sourindro Mohun Tagore ("Short Notices of Hindu Musical Instruments," p. 77, and "Universal History of Music," p. 50), the Hindu name for the musical bow is *pináka*. It is a one-string instrument played with the tips of the fingers. The *pináka* is believed to be the father of all stringed instruments, and to have been invented by Shiva (Mahádeva, the Destroyer).

In conclusion I will remark that so far as New Guinea is concerned, the musical bow has not been found as yet in the western (Dutch) part of the island. Thus it would seem that the *pagola*, mentioned by Professor Mason, refers to eastern (German or English) New Guinea.

H. ten Kate.

Batavia, Java, January 15, 1898.

I am grateful to Dr ten Kate for giving us two or three new localities for the "musical bow." The Patagonian area is entirely new to me. Surely the horse-hair string of the bow would not be attributed to pre-Columbian America by the most zealous advocate of the similarity theory.

With reference to the "pináka" Mr Hawley tells me that he is not sure about its being a musical bow in the sense here in mind. Dr ten Kate has quoted correctly from the Rajah's "Short Notices," but it does not appear, from his definition, that the one-stringed instrument played with the tips of the fingers is a musical bow at all. If Dr ten Kate is sure that this "pináka" is a musical bow we should be very glad to know it, because there is no example of it in the United States National Museum nor in the Brussels Museum Catalogue.

As to the question of invention originating in a number of localities, I have expressed my opinion in my papers on "Similarities in Culture," "Migrations and the Food Quest," and on "The Introduction of the Iron Age in America." It may be laid down as a proposition to which all ethnologists will agree that simple inventions having few parts, functioning in a single action, might arise independently in various parts of the world; but devices consisting of many parts, functioning in unusual ways or having many functions, are less and less likely to have arisen independently. Indeed, there are some groups of inventions so special that they are known by experts to belong to a single school, or even to have been the work of a single individual, such as a Cremona violin, or the decorations on a Northwest Coast rattle. At any rate, with the coöperation of our colleagues we shall know something about the geography of a very interesting instrument.

O. T. Mason.

Washington, D. C., March 3, 1898.

A Holy Mountain.—As Mount Demavend plays an important part in the popular fancy of the Persians, so in the eyes of the Kirghiz (of central Africa) does Mustagh-ata, as it is enveloped in a mysterious shimmer and is clad in a variegated mantle of fantastic traditions and legends. They look upon Mustagh-ata as a holy mountain—a *masar*, or grave of saints—where seventy-two saints are buried, and among them Moses and Ali. They tell that only an old *ischan*, or holy man, had in ancient times ascended to the top of this mountain, where he found in a garden a white camel and old men in white garments and with long white beards; and they believe firmly that there is a city, which they call Yanaida, whose inhabitants are absolutely happy and possess all the enjoyments of life, where a perpetual spring prevails, where the gardens always bear fruit, and where the women are beautiful and never grow aged. They declared that the mountain could not be ascended, abysses and acclivitous slopes preventing any progress, the cliffs being covered by ice as bright as steel, and the wind, the sole master of the region, would sweep us away like grains of sand were we to attempt to set the giant at defiance.—*Sven Hedin in Geographical Journal, London, March, 1898.*

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~~with it nutrient molecules which possess nitrogen, but which need~~ some slight change in condition to give them vital activity. This change is effected by the further decomposition of the denitrogenized product of the previous oxidation. Acted on at once by the affinities of oxygen and of nutriment, it breaks up into two new molecules, one of which combines with oxygen, the other with the nutrient molecule. The energy set free by the oxidation suffices for the purposes of the nutrition process. As a final result we have protoplasm on the one hand, and degradation products, of no further use to the body, on the other. Like urea—the nitrogen waste—this carbon waste is now removed from the body, and the tissues are once more free and in condition for a repetition of the active vital process.

Such, or something not greatly unlike this, seems to be the organic process. Life appears to result from the play of the affinities of oxygen for nitrogen and carbon. Combination of oxygen with nitrogen compounds sets the wheels of life in motion, yielding energy which is free to produce organic motion. Combination with carbon compounds winds up again the clock of life, and prepares for a new period of activity. But the affinity of oxygen for the organic molecules is resisted, and cannot take place effectively except when assisted. Vibratory impulse, resulting from external irritation, aids its affinity for the nitrogen molecule, and induces the active state. Double chemical action aids its affinity for the carbon molecule, which it can attack only by aiding in the reformation of protoplasm. Possibly it may have slight powers of attack when unassisted, but its vigorous action seems to require these aids. And in this fact we have a possible solution of the mystery of life, for it is to some such play of affinities that sensory and motor activities, and the production of new protoplasm, are due, and in this sense organic life is a result of oxygen affinities.

——:o:——

INDIAN MUSIC.

BY EDWIN A. BARBER.

THE Indian tribes of America possess to-day but a limited knowledge of the art of music, though the Chippewas are said to have employed, to a limited extent, some years ago, a method of notation which was, at least, familiar to the medicine men of the tribe. A manuscript, which the traveler Catlin pro-

cured from the Indians themselves, is composed of pictorial devices painted on birch-bark, and was produced on certain occasions to suggest to the mind of the performer the particular song which it represented. It is stated that some of "The North American Indians also use rude little pictures, rough writing we may call it, to help them to remember songs and charms. Each verse of a song is concentrated into a little picture, the sight of which recalls the words to one who has once learned it. * * * A picture of a circle, with a figure in the middle represents a verse of a love song, and says to the initiated, 'Were she on a distant island I could make her swim over.'"[1]

The musical instruments of the savage tribes of North America, however, were, and still are, of the most primitive sort, consisting of rattles made of wood, gourds, tortoise shells and the hoofs of deer, of bone whistles and of square or cylindrical skin-covered drums. Some of the savages of South America made flutes of the bones of wild animals, some of wood carved in the semblance of human heads, drums covered with the skin of monkeys and nondescript instruments made of variously-colored sea shells. One of the latter, which was exhibited at the last meeting of the Congress of *Americanistes* in Madrid, in the summer of 1881, was made of two parallel rods held together by eighteen shells, one end being ornamented with the jaw-bone of a man or monkey. The Indians inhabiting the interior of British Guiana still use rattles to accompany the music of the dance. In the Academy of Natural Sciences at Philadelphia are a number of interesting things from that country, in the valuable collection of the late Professor S. S. Haldeman. Several rattles are made of matting with black and white decoration. A conjuror's rattle consists of a large gourd with feather embellishments, and a painted and ornamented drum is covered at one end with the skin of a jaguar, the drum sticks resembling long lead pencils with large balls attached at one end.

It is necessary to look elsewhere for a higher development of the musical instinct in the Western continent. The ancient graves of the California coast have yielded a numberof primitive flageolets of bone, possessing, in some instances, four or five finger-holes, which, doubtless, were capable of producing a variety of notes.

[1] The Dawn of History. Edited by C. F. Keary, M.A., of the British Museum, London, 1878, p. 186.

In the cemeteries of Chiriqui, on the Isthmus of Panama, a large number of these unpretentious instruments have also been found, many of which have been elaborately molded from clay into representations of birds and animals.

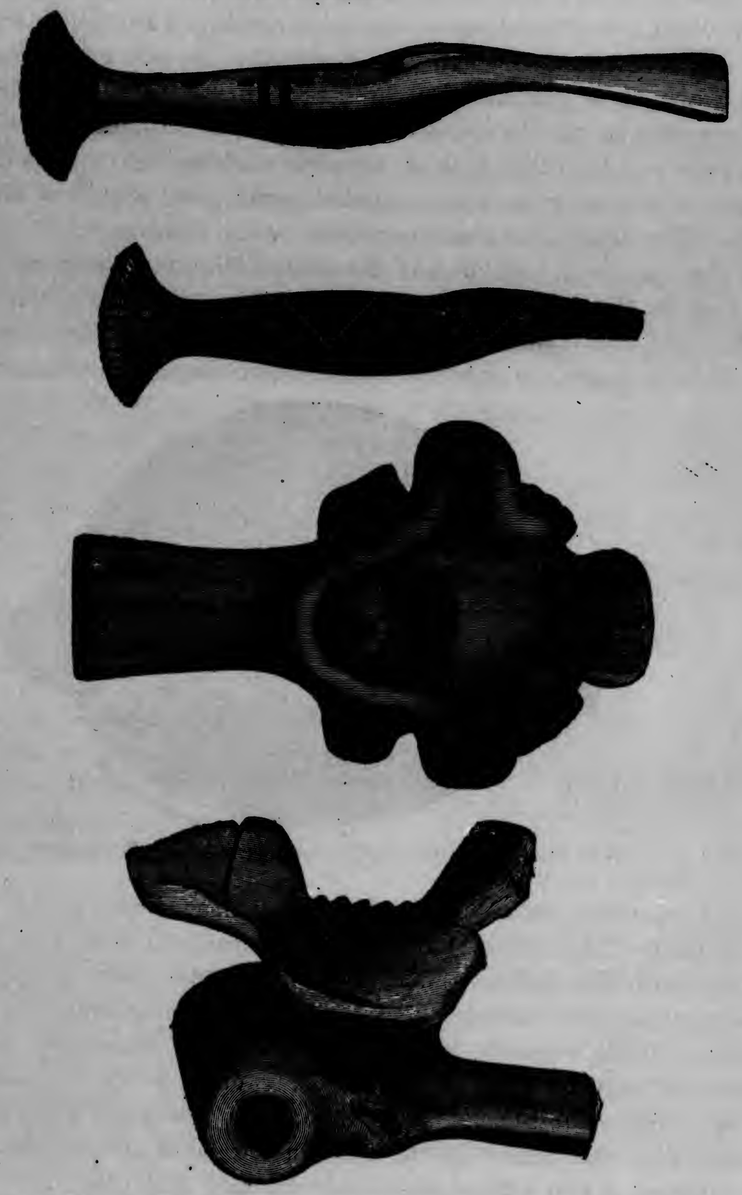


FIG. 1.—Mexican Wind Instruments: (clarionets and whistles) from the originals in the Poinsett & Keating Collection, Academy of Natural Sciences.

The ancient Mexicans used flutes, trumpets of sea shells and

other wind instruments. Several of these, now deposited in public museums, can be made to produce a series of notes in which the *fourth* and *seventh* are omitted, and certain authors have, therefore, reached the somewhat hasty conclusion that the Aztecs, Peruvians and other American peoples employed a peculiar scale of only five tones, to which they have given the name *pentatonic*. Instruments of percussion figured prominently in the religious ceremonies of the Aztecs, and the *huehuetl*, or huge drum, which was covered with the skins of serpents, could be heard for a distance of several miles when sounded on the great temple of Mexico. The Aztecs also made creditable wind instruments of clay. In the excellent collection of Mexican antiquities gathered together by the Hon. J. R. Poinsett and Mr. W. H. Keating in 1830, and now deposited in the Academy of Natural Sciences at Philadelphia, are a number of earthenware flageolets measuring



FIG. 2.—Curious Instrument from Ometkepec. From a drawing furnished by Dr. D. G. Brinton.

from six to nine inches in length and ornamented with brown and red paint. The majority of these are furnished with four, and some with five holes. There are also in the same collection many small clay whistles, some of them being wrought in the form of birds, serpents, heads of monsters and imaginary creatures of unsurpassable ugliness. They emit, in most cases, a clear, shrill sound when blown, though a few yield a peculiar noise like that made by the sudden escape of steam. One is composed of two tubes placed side by side, and gives out two distinct sounds.

Dr. Daniel G. Brinton has kindly furnished for this article the

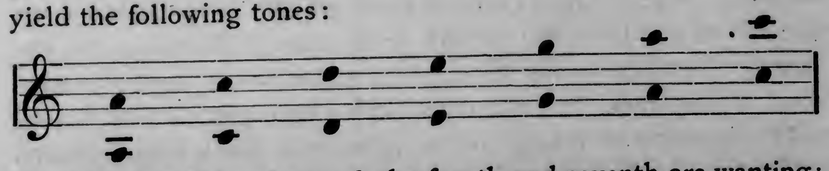
drawing and description of a curious antique musical instrument, somewhat resembling a turtle in form, which was procured from the Island of Ometepec in the great lake of Nicaragua, by the late Dr. Berendt, during his recent excavations in Central America. It was found in connection with a shoe-shaped burial urn, with a quantity of roasted maize, is made of black clay, polished and ornamented with incised lines on the upper side, and possesses four holes arranged in a square on the lower. It was in all probability used by suspending it from the neck of the ancient musician by means of the two rings which project from either side near one end. When held in both hands, the lower part upward, the four holes being covered with the fingers, a variety of sounds can be produced by blowing into the neck or mouth. By a certain manipulation, a number of simple airs may be played, such, for instance, as the first part of "Yankee Doodle," and the following melody:



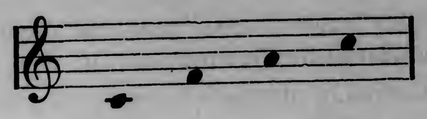
This unique relic is the first of the kind found amongst the remains of the old Nahuatl races which evinces any particular advancement in the art of music.

The Peruvians seem to have reached the greatest musical proficiency of any of the American races, and were also somewhat skilled in the mimetic arts. They were possessed of considerable histrionic ability, and combining their national songs with the drama, for the edification of their Incas, they produced rude operas, for which the principal actors were regularly educated. They made trumpets of baked clay resembling our modern bugle in form and which, possibly, were capable of being played in the same manner. They also had an instrument called the *huayra-puhura*, somewhat like the *syrinx* of the ancients, or Pandean pipes, which consisted of a number of hollow reeds or canes of varying lengths, fastened side by side, handled in the same manner as a mouth organ. One of these graceful instruments is preserved in

the British Museum, and consists of a double row of pipes which yield the following tones:



in which, it will be observed, the fourth and seventh are wanting; but another example in the extensive Peruvian collection of H. G. Clay, Esq., of Philadelphia, is made of four delicate reeds attached to a necklace of wampum, which emit the notes:



including the fourth, but omitting the seventh. Dr. Tschudi, in his great work on Peru, figures a syrinx composed of eight pipes, with a highly ornamented base and extra stops in the side.

Some of the modern Indians of Peru (the *Qquichua* and *Aymara* use a musical instrument somewhat resembling a flageolet (*qquena*), with which they make most melancholy music. Their *yaravis*, or tunes, are generally in the minor key, and when heard at a distance, or in the rarified atmosphere of the mountains in the night, are exceedingly impressive. Another instrument (the *chirimia*), a sort of clarionet, produces an even more melancholy music than the *qquena* and is generally played in concert of many instruments, while the latter is played in pairs. "The melodies played by these Indians," writes Señ. Don Frederico Blume, "are very peculiar and sentimental. It seems the performers are weeping over past glories. I was running the preliminary line for the Arequipa R. R., in 1861, and stopped over night at Quishuarani, a place (or rather the name of no place except a few huts scattered here and there among fig trees) some leagues below the village called Uchumayo, on the Arequipa or Chiri river. All at once I started in the midst of my sleep, roused by a terrific singing. After a considerable yelling which ended in a melancholy sigh, there followed a long *yaravi*, of course in the minor key, and then came another long, loud exclamation and then a most distressing *yaravi* again, and so on during the entire night. The news had just arrived by horse from Arequipa that the brother of the wife of Lecaros (in whose hut we were staying) was dead.

The announcement came, it seems, unexpectedly, and the explosion was that of a volcano of grief—terrible jets from time to time, then a quiet interval, and then again a great outburst, and so on. I have heard in Germany and elsewhere many masterpieces of music, but nothing to be compared with this dramatic and spontaneous opera. The exclamations were exclamations of grief, of pain, and the more quiet intervals were recitals of the whole life of the departed, by the sister, narrating how they had grown up together as children, how they had played and sometimes quarreled, and so on through later periods to the moment of receiving the news. His virtues and other qualities were reviewed and then grief overcame the woman and she cried out again, singing most distressfully:

"Thus I came to understand how their 'operas' originated and how natural a mode of expression they are."

Mr. Blume also states that the musical compositions of Peru may be classed under three heads: *yaravis*, *catchuas* and *catcharparis*, the two latter being used for dancing. "I saw at Totora," he writes me, "a grand procession at the funeral of a dead child. They had it adorned and tied to a shingle like a crucifix, but not with arms outstretched; and an Indian, holding the child high above his head in a vertical position, led the procession, which danced to the music of a weird song, from one village to another."

This ceremony and the accompanying music were said to be very ancient. In the north of Peru the Indians have an instrument made of a flute and a bladder—a primitive bag-pipe—and another, a sort of xylophone, made of a series of pieces of hard, sonorous wood.

The historian Garcilasso quaintly writes of the ancient Peruvians: "In Musick they arrived to a certain harmony, in which the Indians of *Colla* did more particularly excell, having been the Inventors of a certain Pipe made of Canes glued together, every one of which having a different Note of higher and lower, in the manner of Organs, made a pleasing Musick by the dissonancy of sounds, the Treble, Tenor and Basse, exactly, corresponding and answering each to other; with these Pipes they often plaid in consort, and made tolerable Musick, though they wanted the Quavers, Semiquavers, Aires, and many voices which perfect the Harmony amongst us. They had also other Pipes,

which were Flutes with four or five stops, like the Pipes of Shepherds; with these they played not in consort, but singly, and tuned them to Sonnets, which they composed in meetre, the subject of which was love, and the Passions which arise from the Favours or Displeasures of a Mistress. These Musicians were *Indians* trained up in that art for divertisement of the *Incas*, and the *Curacas*, who were his Nobles, which, as rustical and barbarous as it was, it was not common, but acquired with great Industry and Study.

"Every Song was set to its proper Tune; for two Songs of different subjects could not correspond with the same Aire, by reason that the Musick which the Gallant made on his Flute, was designed to express the satisfaction or discontent of his Mind, which were not so intelligible perhaps by the words as by the melancholy or chearfulness of the Tune which he plaid."

The Bureau of Ethnology at Washington is now making preparations for the collection of data relating to the music and musical instruments of the various peoples of the new world, and many facts of an interesting nature will doubtless shortly be given to the scientific world in the hitherto comparatively untrodden field of native American music.

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ON THE OCCURRENCE OF FOSSILIFEROUS STRATA IN THE LOWER PONENT (CATSKILL) GROUP OF MIDDLE PENNSYLVANIA.[1]

BY E. W. CLAYPOLE.

THE Catskill group of New York has been hitherto a great palæontological desert in American geology. Though much time and labor have been spent upon it by different geologists, little, I may almost say nothing, has thus far rewarded their labor. Here and there a few traces of life have been discovered, but these traces, faint and few as they were, have in many instances ended in disappointment, and now forty years after the establishment of the group by Professor Hall, the Catskill remains, even more than it was then, a great desert. The abundant life-remains that continue in New York to the very top of the Chemung there cease altogether. The abounding wealth of the Lower Carboniferous, especially in the West, sets in as soon

[1] Abstract of a paper read before the American Association for the Advancement of Science at Montreal, in August, 1882.

Music

Summit - Jan. 1914



INTERESTING WESTERNERS

Recorder of the Red Man's Music

AMERICA is one of the few nations that has not preserved in permanent form the native melodies of its primitive people. Since these melodies express the folk-lore of the race, to allow them to lapse is to lose historical material of value. Charles Wakefield Cadman, the youthful composer of the West, has taken it upon himself to immortalize the rhythm inherent in the native North American Indian. During the past few years he has devoted most of his time to the composition of Indian songs, and this past season has completed an Indian opera, "Daoma," for Alice Nielsen.

In the opera there are some sixty Indian themes which Mr. Cadman has taken by phonographs directly from the scattered Indian tribes on reservations on the North American continent. He has been helped in his interpretation of these records by the researches of Francis La Flesche, the son of an Omaha chief, who is United States Etymologist. The composer, with the assistance of La Flesche, has endeavored not to alter the original character or intent of the melodies. To be still more true to the primitive conception there will be many Indian instruments used, especially the flageolet, so popular with the Omaha Indians, which is a pipe inserted in the mouth as a clarinet and whose eight holes carry out the scale.

Mr. Cadman asserts that the chants of the native North American Indian are on the same grade with the Gregorian, and that their love songs and plaintive wails are among the most beautiful themes the musical world has ever heard. When asked how he overcame the well-known reticence of the Indian about letting the white man into his tribal traditions, this interpreter of Indian music admitted that he had found it absolutely impossible to "drive" the North American Indian.

"I remember," he said, "particularly an experience I had with a chief called 'Turning Horn.' He was a North American Indian and inherently musical. I knew that to him had come some of the most rhythmical Indian melodies in existence. It took me several months to convince him, gently and kindly, that white people did not want to deprive him of his music as they had of his lands, but that they were interested to preserve it and that they would have more respect for his race if conversant with its classical melodies.

" 'Bad medicine, bad medicine' was his declaration. Finally, because I did not force him, because I allowed him to come to a willingness himself, he proposed that he should sing a series of songs of his own people, and once started, the main difficulty was to get him to stop long enough to insert a new record."

Mr. Cadman, in collaboration with La Flesche, has recently completed the collection and transcription of many musical ceremonials of the Osage tribe of Oklahoma. This transcription is being incorporated in a government report. Mr. Cadman has found that the Indians have a sacred and reverential feeling for their music. Take for instance their attitude toward their love songs. They would never think of rendering these songs on any other instrument than the Lover's



Charles Wakefield Cadman, the Western composer, musical historian of the folk-lore of the North American Indian, who has completed an Indian opera, "Daoma," for Alice Nielsen, embodying sixty themes taken phonographically from scattered tribes. Mr. Cadman has been assisted by Princess Tsiani Redfeather (lower portrait), daughter of the famous Cherokee chief, Tecumseh, whose musical education enables her to interpret correctly the native melodies of her race and who intends devoting her life to this work. She has a singing voice of rare charm and sweetness, and is now studying in Denver, Colorado

Flute. Near the end of this flute are four holes signifying north, south, east and west. Every musical instrument of the North American Indian has this indication of the compass somewhere on it. But the swallow on the Lover's Flute adds to the significance. The swallow is perched midway on its length, flying toward these holes. This rendered in verse reads:

> Straight as the swallow flies,
> Flies my love toward you.

The native strains of the North American Indian's music are almost always pathetic. The reason for this, Mr. Cadman asserts, is that he realizes that he is passing from the face of the earth. Before he entirely passes, therefore, it seems to Mr. Cadman important that his folk-lore be phrased. The negro melodies have already been preserved in classical music, but while these melodies are American in a way, they are also African. The North American Indian music is indigenous and is on that account the only true folk music that America is entitled to claim.

It is the hope of Mr. Cadman and others interested in this race that there will spring up among the Indians themselves those who can interpret the Indian melodies that composers have put into classical form. A musical education is needful if the native Indian is to do this. At last one among them has secured it. This is Princess Tsiani Redfeather, daughter of the famous Cherokee chief, Tecumseh. Encouraged by Mr. Cadman and the leading etymologists of the United States, the Princess has decided to devote her life to making the native music of her race the better understood and thereby the better appreciated. She has a voice of rare charm and sweetness, was educated at the Indian college at Eufaula, Oklahoma, and is now studying privately at Denver. Although mingling almost wholly with white people she retains her native dress which adds to the effectiveness of her interpretations.

With Princess Redfeather and Charles Wakefield Cadman combining to do justice to the indigenous music of America, and with Alice Nielsen adding the beauty of grand opera settings to the Indian themes, it is not too much to predict that the music of the North American Indian will soon rank with the folk music of other nations.

ALICE SPENCER GEDDES.

A Queen Without a Queendom

SHE did not seek the throne; it was thrust on her when King Kalakaua died. Even Queen Liliuokalani's enemies—and she has many of them—admit that it would not have displeased her had another been made the ruler of the Hawaiian islands. But having been proclaimed the rightful queen of the monarchy when her brother fell dead in the Palace Hotel of San Francisco in 1891, she determined to rule with all the regal rights of the Kamehamehas before her, and this firm resolve cost her a throne and ultimately brought about the annexation of the islands to the United States.

The story of the life of the Queen is one of brilliant triumphs and sad defeats. Almost alone she fought the missionary party who had gained power on the islands and had combined to overthrow the monarchy and establish a republic. For a time she triumphed over them, crushed one intrigue after another, only in the end to be triumphed over in turn—and thrust into a prison-room of the old Iolani Palace. There she faced the threat of execution with a smile, composed the native song of undescribable pathos—*Aloha Oe*, which means "Farewell to you"—as she watched through the window for her executioners to come.

But they did not come, the men who were to take her life; and later, yielding to the intercession of friends, the doors of Iolani were opened for her, not however until President S. B. Dole, provisional chief executive of the new republic, felt himself safe in office again. The Queen had been arrested on a charge of misprision of treason, an ill-planned revolution having bubbled up soon after the new form of government was established, and her accusers charged her with inciting the disturbance. A sentence of five years at hard labor and a $5000 fine was imposed; which, it may be hardly necessary to add, she was never asked to execute.

Since then she has been a queen without a queendom, working among her people, particularly the school children, whom she never tires of having with her. To be sure, many times from January 16, 1895, to June 16, 1897—from her forced abdication to the annexation of the islands—she called upon the United States to recognize her as the rightful ruler of Hawaii. But her efforts were futile, and with the signing of

the annexation treaty she abandoned hope of reigning again.

Her scepter has given place to a pen. Numerous articles she has written, and one book, "Hawaii's Story"—admirably done and to which the reader is referred for an account of the rise and fall of the kingdom of the Sandwich islands, as well as her memoirs. But as a composer of native music she chooses to be remembered: the Queen was the first to write down the notes and lyrics of the generations-old-folk-songs, and many of the now popular Hawaiian verses and songs were conceived and published by her. Not only a writer and composer, she is a student with a broad and keen understanding of the economic conditions of the world.

Almost any day she is to be seen sitting on the *lanai* of her mansion on Beretania street, dictating an article or letters to her secretary who is always near at hand. On the 2nd of September, 1913, she was seventy-five years old, yet one would never think so; nor would one think that this Queen of such rare talents and strange genius has suffered the serried experiences of revolutions, prison and abdication, together with all the other tragedies known to persons of her years. The gentle climate of the tropics has been kind to her and, perhaps in gratitude to it, her home will always be on the island of Oahu she says.

It was only recently that the Queen, to the surprise of all her friends, announced that she was going to visit the home of Pele—the wrathful fire goddess of South Pacific mythology, who was supposed to dwell in the Kilauea volcano on the island of Hawaii—as a tribute of respect to the memory of Queen Kapiolani, one of the first converts to Christianity. That royal personage once descended to the boiling lava, and while singing Christian hymns threw sacred berries into the lake of fire, thus forever breaking the power of Pele over the hearts of her people. In Hilo, where Queen Liliuokalani and her party remained for a number of days after visiting the volcano, many entertainments were given in her honor. She returned to Honolulu delighted with the excursion, yet saying that she would never leave the island of Oahu again.

Time has altered many things in the life of the Queen. But now, as she is "sitting in the bow window of life" (using Stevenson's splendid phrase), her mind reminiscent of her brilliant triumphs and sad defeats, she is still the same haughty Liliuokalani who reigned over the Eight Islands during four stormy years. The same regal mien, partly inherited and partly acquired—perhaps while attending the beloved Victoria's jubilee in England—is as noticeable now as in the days of her monarchy.

A number of friends, with her in the uncertain times of the nineties, gather at her mansion occasionally, and sometimes she is hostess at a *laua*—an Hawaiian banquet—to a few closest to her. But usually she is quite alone in her home, except for her "retainers," as she still calls them. Kapellmeister Berger's band, which is engaged by the city and is a survivor of the monarchy, serenades the Queen Thursday mornings. It is a pretty tribute of respect that Honolulu pays to the last royal ruler. Twice a week, and sometimes oftener, she drives in her carriage, usually toward beautiful Nuuanu valley, and always through the park surrounding the old Iolani Palace, now the executive building. From the winding roadway lined with cocoanut palms she can see the window of the room in which she once stood as a prisoner. And she is still sensible of some of the same bitterness of feeling as when she said:

"Many of the missionaries who came to these islands gave up preaching and took up more lucrative work. They came to us from America, and we believed they were our friends, and that the United States was also. But at last, after years had passed, and they had become powerful, they overthrew our monarchy, set up an independent republic of their own, and soon the islands became a part of the United States, at the instance of these missionaries, and our protests were not listened to."

Seen in that light, one is compelled to sympathize with Queen Liliuokalani. One is tempted to forget the unparalleled development of the islands since they became a territory, the fortunes which have been trebled in a few short years, and feel that the Americans interested in the growth of Hawaii were not justified in forcing her from the throne. Though her actions as ruler were often far from impeccable, her reign was enlightened by clear intelligence, and her battle of wits against the mission ary party was marked with shrewd maneuvers, which was not the case when the

Sunset - Jan. 1914.

INTERESTING WESTERNERS



Recorder of the Red Man's Music

AMERICA is one of the few nations that has not preserved in permanent form the native melodies of its primitive people. Since these melodies express the folk-lore of the race, to allow them to lapse is to lose historical material of value. Charles Wakefield Cadman, the youthful composer of the West, has taken it upon himself to immortalize the rhythm inherent in the native North American Indian. During the past few years he has devoted most of his time to the composition of Indian songs, and this past season has completed an Indian opera, "Daoma," for Alice Nielsen.

In the opera there are some sixty Indian themes which Mr. Cadman has taken by phonographs directly from the scattered Indian tribes on reservations on the North American continent. He has been helped in his interpretation of these records by the researches of Francis La Flesche, the son of an Omaha chief, who is United States Etymologist. The composer, with the assistance of La Flesche, has endeavored not to alter the original character or intent of the melodies. To be still more true to the primitive conception there will be many Indian instruments used, especially the flageolet, so popular with the Omaha Indians, which is a pipe inserted in the mouth as a clarinet and whose eight holes carry out the scale.

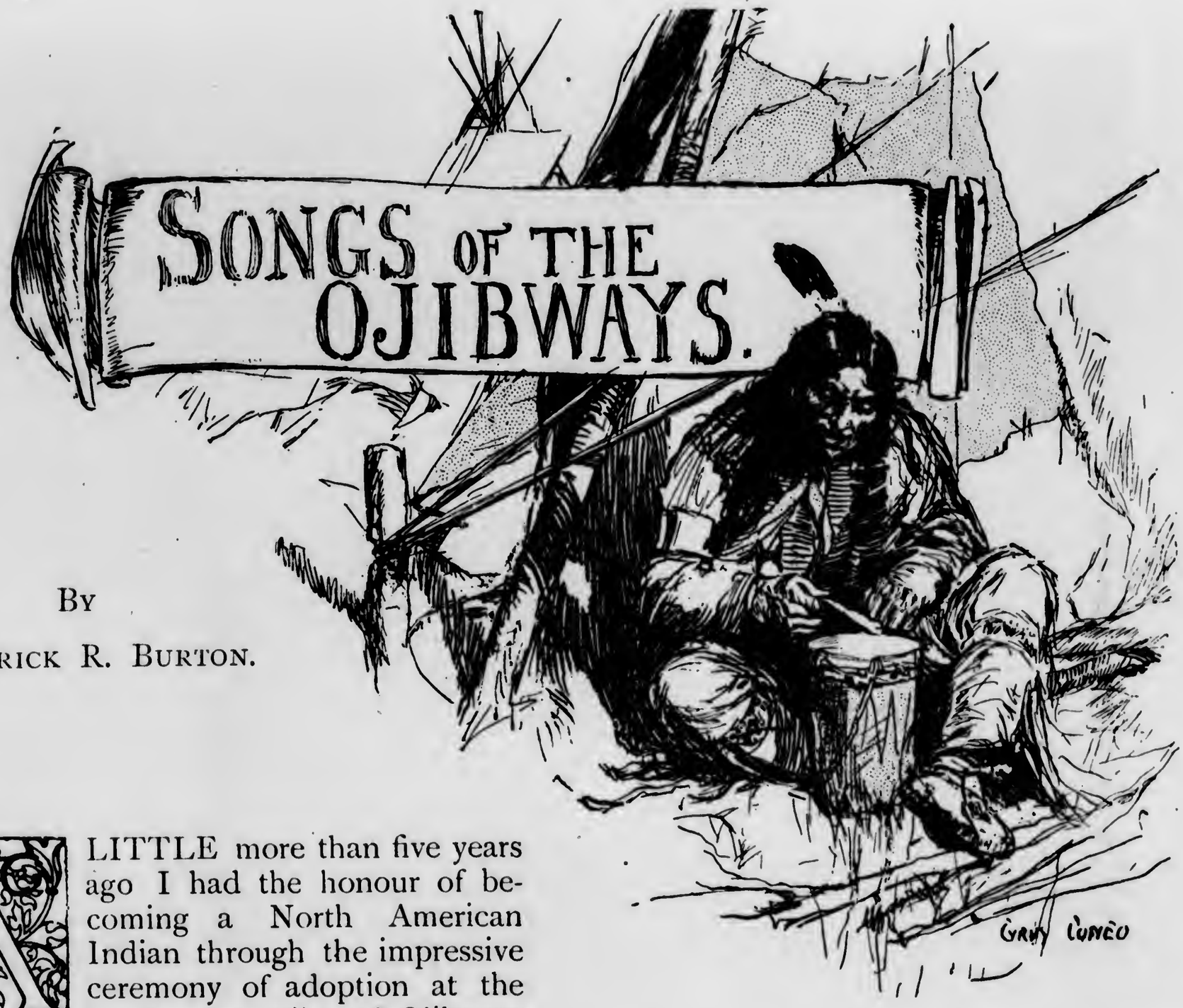
Mr. Cadman asserts that the chants of the native North American Indian are on the same grade with the Gregorian, and that their love songs and plaintive wails are among the most beautiful themes the musical world has ever heard. When asked how he overcame the well-known reticence of the Indian about letting the white man into his tribal traditions, this interpreter of Indian music admitted that he had found it absolutely impossible to "drive" the North American Indian.

"I remember," he said, "particularly an experience I had with a chief called 'Turning Horn.' He was a North American Indian and inherently musical. I knew that to him had come some of the most rhythmical Indian melodies in existence. It took me several months to convince him, gently and kindly, that white people did not want to deprive him of his music as they had of his lands, but that they were interested to preserve it and that they would have more respect for his race if conversant with its classical melodies.

" 'Bad medicine, bad medicine' was his declaration. Finally, because I did not force him, because I allowed him to come to a willingness himself, he proposed that he should sing a series of songs of his own people, and once started, the main difficulty was to get him to stop long enough to insert a new record."

Mr. Cadman, in collaboration with La Flesche, has recently completed the collection and transcription of many musical ceremonials of the Osage tribe of Oklahoma. This transcription is being incorporated in a government report. Mr. Cadman has found that the Indians have a sacred and reverential feeling for their music. Take for instance their attitude toward their love songs. They would never think of rendering these songs on any other instrument than the Lover's

Strand Mag April 1907



SONGS OF THE OJIBWAYS.

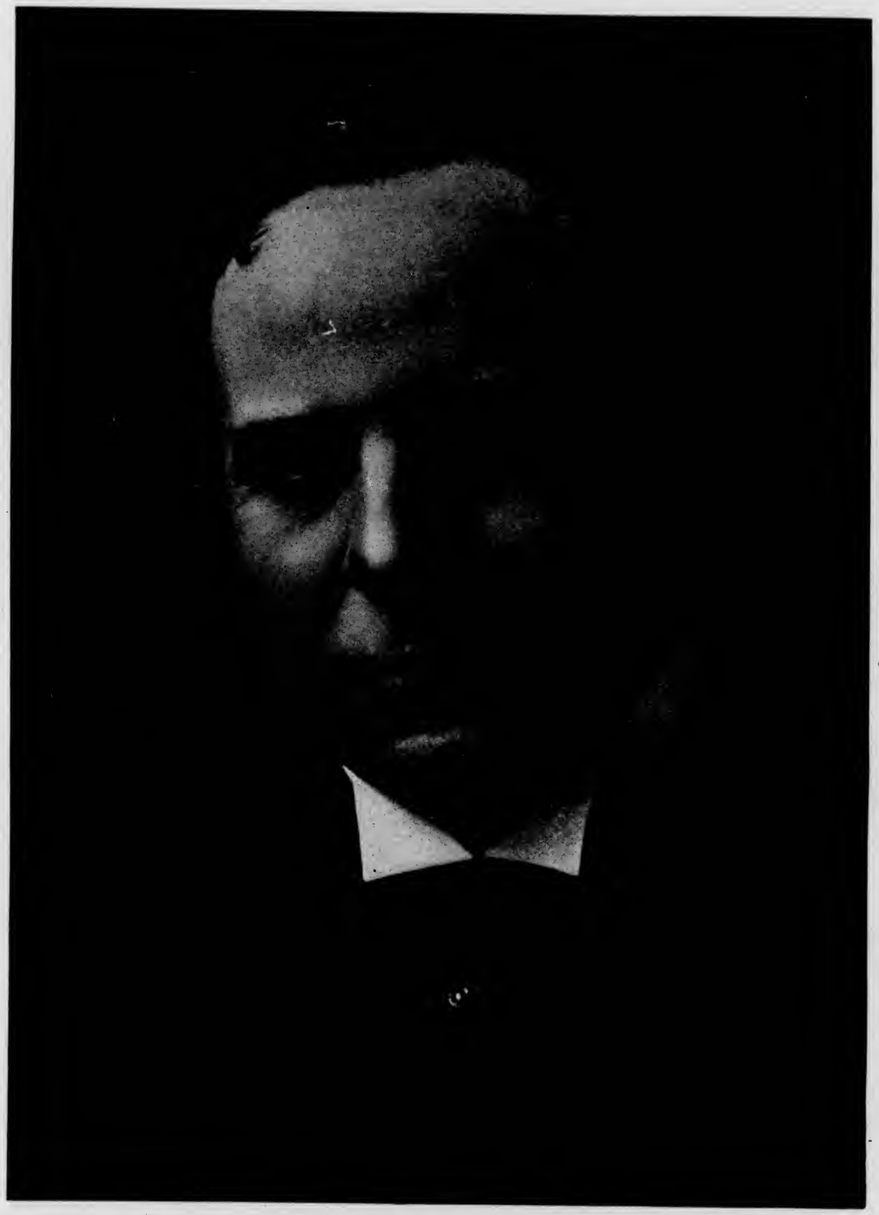
By

Frederick R. Burton.

A LITTLE more than five years ago I had the honour of becoming a North American Indian through the impressive ceremony of adoption at the hands of a tribe of Ojibways living along the Canadian shores of Lakes Huron and Superior. This singular distinction was due to my self-appointed task of preserving the songs of these people from extinction. It came to me only after what seemed to be no end of opposition to my work of reducing their music to notes —for they have no system of notation whatever, their songs, like their well-known legends, being transmitted orally from one generation to another. At first they put every obstacle in my way, except physical violence. They had sore throats when I asked them to sing, or they suddenly forgot what English they knew, or they failed to keep appointments, or they refused point-blank to let me hear a sound.

I could not understand it, for at that time I had nothing better than the white man's usual misconception of Indian character, and I stuck to my work with the greater obstinacy because the opposition of the Indians heightened my conviction that their songs were worth getting at any cost. So on many occasions I lay for hours behind bushes, music-paper on the ground before me, jotting down such notes as I could distinguish above the clamour of the drum in a party of Ojibways singing near me and unaware of my proximity. In this way, after scores of failures, I succeeded in transcribing "My Bark Canoe" and some half-dozen other songs, and meantime I was doing my best, in an ignorant but patient way, to win the confidence of the Indians and convince them that I contemplated no wrong.

Their attitude may be understood if I quote part of a speech made to me by Tetebahbundung, who eventually became one of my most valued and faithful collaborators. I was early attracted to him because of his voice, one of the most perfect and lovely tenors I have ever heard. That it is an utterly uncultivated voice might go without saying. Tetebahbundung cannot read or write any language, much less music, and all he knows about the art was taught him by Nature; but she was a good teacher, and his "tone production" is as perfect as anything human can be. In recent years I have made him sing before professional tenors, who have frankly expressed their despair of equalling his "production," and who have been much mystified as to "where he got his method."



THE RIGHT HON. RICHARD BURDON HALDANE, M.P.—PRESENT DAY.
From a Photo. by J. Caswall Smith.

I used to try to induce Tetebahbundung to sing for me privately and without the drum, that I might be sure of notating the melodies without error. I argued with him, challenged him, teased him, offered him money, all to no purpose. This was through Obtossoway, a friendly chief who spoke English fluently and who had the Indian's traditional gift of oratory. At length we were upon such terms of friendship



TETEBAHBUNDUNG AND HIS LITTLE SON.
From a Photo. by Alfred S. Campbell Art Co., Elizabeth, N.J.



MRS. SAGACHEWIOSE.
From a Photo. by Alfred S. Campbell Art Co., Elizabeth, N.J.

in all matters except music that I succeeded in drawing from him his reason for denying me the one favour I asked. It was in my one-room cabin on an island in Lake Huron. None were with us except the members of my family. Tetebahbundung made me a long speech, a portion of which Chief Obtossoway translated as follows:—

"Listen, sir! We like you, we like your lady, we like your children, but we do not understand it. Listen, sir! When the white man first came among us we did everything he told us to, for it was plain that he knew much more than we did. What has been the result? He has taken away our land, he has denied us the freedom of the forest, he has penned us in reservations, he has taken away from us everything *Indian* that we had except our songs, and now you come to take away them also. Tetebahbundung will be looked on as a bad man by his people if he sings for you. As long as he lives they will reproach and shun him as a traitor to his people. For you will send our songs all



FLASHLIGHT OF CAMP-FIRE, AT LONGFELLOW ISLAND.
From a Photograph.



THE CHIEF OBTOSSOWAY.
From a Photo. by Alfred S. Campbell Art Co. Elizabeth, N.J.

over the world, the white man will sing them everywhere; and after that you will turn on us, like the white men who preceded you, and say, 'Get out! I have no further use for you.'"



AN ARRANGEMENT OF "MY BARK CANOE."

A long debate followed, in which I tried to show my friends that I purposed to take away nothing that I should not leave behind; that they would still have their songs, no matter how many white men sang them. My argument was not convincing, and when I spoke about harmonizing the melodies, and writing accompaniments for pianoforte or organ, I succeeded merely in befogging a subject already dark and dubious.

Nevertheless, it was through harmony that eventually I won the confidence and co-operation of the Indians. It must be understood that their music is limited to melody and rhythm. Their instrumental outfit includes only the drum and various minor contrivances like gourd rattles and notched sticks for accentuating the rhythm. There is, indeed, a very rare instrument miscalled a flute—it is really a magnified flageolet—but I am convinced that it came into existence only after the coming of white men with their military bands, and that it is, therefore, an attempt at imitation of the white man's music. Whatever its origin and antiquity, it can have no bearing on the matter of harmony, because its intervals are ludicrously imperfect. Moreover, it is never used as an accompaniment to the voice, but as a substitute for it, the bashful suitor playing his love-song on the instrument before he finds courage to express his sentiments in words.

So song is the beginning and end of Ojibway music, and the Indians had not discovered the possibility of singing in parts. Their choruses are unisonous, or, when both sexes sing together, unison in the octave.

One day, when I was in the depths of perplexity over the difficulties with which the Indians beset my path, I resolved on a hazardous experiment. Not to make a long story of it, a quartet of white singers came my way and I speedily interested them in my work. In the forenoon I made a four-voice arrangement of "My Bark Canoe," the words of which I had translated long previously; in the afternoon the quartet sat on my bed and rehearsed the music; in the evening I invited all the Indians in the vicinity to a camp-fire, which is a social function the pure delights of which surpass any that may be had in a drawing-room. On such an occasion the Indians dance singly and together around the fire; he who will not trust himself to sing tells a story; all drink deeply of coffee and eat as much cake as may be provided, and the men smoke.

About fifty Indians—men, women, and children—responded to my invitation. When the ice had been broken and I thought the time was ripe for it, I made a speech, in which I promised to show them just what I was doing with their songs. "If you will sing 'My Bark Canoe' in your way," I said, "my paleface friends here will sing it for you in our way."

After some characteristic hesitation and talking it over the Indians complied, Tetebahbundung leading and the whole company standing up and joining. Immediately after the Indians had finished the white quartet arose, and, taking the pitch established by the red men, sang the harmonized version with the English words. The effect was marvellous. Leaping to their feet, the Indians shouted and screamed till it seemed as if the sky would split. The white singers were not a little startled by the demonstration, but it was nothing more than frenzied applause, and quiet was restored instantly when they began a repetition of the piece. They had to sing it several times over, and at last the Indians surrounded me, inquiring eagerly if they could learn to sing "like that," meaning in parts.

The experiment succeeded admirably.

From that time all serious opposition to my work ceased, and the Indians became my collaborators. In token of their appreciation they offered me the honour of adoption, the highest compliment the Indian can pay the white, and bestowed upon me the name "Negaunneckahboh," which means "He who stands in front." This name arose from the fact that certain influential members of the tribe saw me first in Chicago, where they had gone to figure in a series of elaborate entertainments. It happened that I was conductor of the orchestra, and the Indians were brought in while a rehearsal was in progress. They were deeply interested, and no work could be had from them until the rehearsal was over. Naturally enough, they referred to me in their conversations about the matter as the man who stood in front, and when they came to name me in the ceremony of initiation it was entirely in accordance with Indian custom that they should choose the designation that registered their first impression of me.



"TRYING UNSUCCESSFULLY TO PICK OUT A TUNE WITH ONE FINGER."

Song enters into every detail of the Ojibway's life. His prayer is a song, as is his mourning for the dead; a religious ceremony is inconceivable without music; it is even an essential feature of his gambling; the climax of a chief's address to his warriors is a song. Some of their songs are crude, well-nigh formless, but in the main their melodies are far superior to those of any other Indian tribe. It is not my purpose to dwell here upon the many technical considerations with which the subject is crowded, and which tempt a theorist to extended discussion; but as one question is always asked by persons to whose attention the subject is brought, I will anticipate it very briefly.

The Ojibway scales are incomplete, the fourth or seventh, and often both, being omitted; but the intervals that remain accord with the intervals of our harmonic scale. Nearly all their songs are distinct in tonality, and therefore susceptible of harmonization.

Interesting as technical considerations are to the theorist, their importance disappears, even to his apprehension, in face of the æsthetic value of the songs. To me they are as charming as anything in the literature of song of any country, civilized or uncivilized, and the devotion of the Ojibways themselves to them is a testimonial to their inherent strength; for in the general decay of everything that pertained to the old Indian life, these songs persist in the affections and habits of the people to a remarkable degree. The words of ancient ceremonials often give place to modern love verses, the melodies surviving the need for which they were created. It is true enough, sadly true, that the younger generation of Ojibways are neglecting the native melodies in preference for white man's music, but this is merely an unfortunate indication of their love of music generally. They are not aware that the trash of the "halls" is far inferior to the tunes of their own making; but, in spite of their growing acquaintance with modern paleface tunes, I have always heard the original native songs under circumstances that called for the deepest feelings of the singer.

I remember a Sunday afternoon when I had occasion to remain long in the immediate vicinity of a wigwam in front of which a young man sat alone, tapping gently on his drum and singing softly to himself. I do not know when he began, but it was one o'clock when I first heard him, and he was still at it when I went away at five. During that period I think he sang no more than six songs. Each was repeated many times before he took up another, and there was one to which he recurred so often that I am quite sure he spent two hours on it.

A number of Indian families were camped

one summer near a rustic hotel on the Canadian shore of Lake Huron. Whenever the tourists had an evening of musical entertainment, the Indians gathered silently on the veranda to listen. One day, when he thought all the visitors were away on fishing excursions, Waubunosa, one of the young braves, in full ceremonial costume, slipped into the music-room and seated himself at the pianoforte. He spent quite an hour trying, unsuccessfully, to pick out a tune with one finger. It was an Indian song he struggled with, not a white man's.

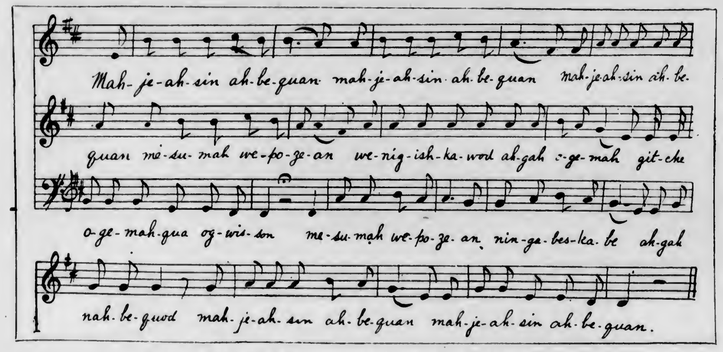
I spent much of one summer on the Garden River Reservation in Ontario, where Tetebahbundung lives. Having occasion to see him of an evening, I strolled over to his log-house. As I approached I heard his drum, and I paused at the door, fearing to make an ill-timed intrusion. He was singing a love-song, repeating it in true Indian fashion many times over. The end came with disaster, for he beat with added vigour, and of a sudden the tone of the drum was dull. Drumming and singing ceased abruptly, and I heard Tetebahbundung mutter a low "Ah!" Then I knocked. He came slowly, and the open door revealed a room dark save for the dying embers in the fireplace, empty save for himself.

"Come in," said he, by way of greeting, and I responded that I had heard him singing. "Yes," he admitted, ruefully, "and now my drum is broke. I pound a hole in it. My wife and boy she gone, visiting. I was lonesome. So I got my drum and sang. No more song now," and he laughed a little.

Is comment necessary? Simply to point out that the white musician, under such circumstances, might betake himself to the pianoforte to ease his soul. Should the strings snap he would no longer sing, failing of instrumental support. To this musical Indian the tuneless drum was as the responsive keyboard, and without it his diversion was unthinkable. I asked him how he would manage now that his drum was broken, and he replied, simply, that he would make another.

It was at Garden River that I found a song that has a certain degree of historical value. Melodically considered, it is one of the crudest examples of Ojibway art I ever heard, but the event with which it is associated makes it especially interesting. About thirty-five years ago King Edward VII.—then Prince of Wales—visited Canada. He went, among other places, to Sarnia, at the southern end of Lake Huron. At that time the chief of the Ojibways was Shingwauk, the ablest man undoubtedly who ever ruled over the tribe. He lived at Garden River, some dozen miles east of Sault Ste. Marie. This general locality has been the ancestral home and head-quarters of the Ojibway people as far back as their history can be definitely traced.

Shingwauk selected twenty warriors, who sailed the length of the lake with him to meet the Prince. When the party was ready to embark the chief made a speech to his people by way of farewell. The climax of the speech was this song, which the chief sang as the boat started from shore, and I am told that it was afterwards sung before the Prince at Sarnia. The tune was an ancient war-song, to which the chief adapted words of his own appropriate to the occasion. I heard the song first from Mrs. Sagachewiose, a granddaughter of Shingwauk, who remembers well how she stood on the shore with all the village and watched the warriors set forth on their journey. I have referred the song to other Indians who were alive at that time, and all remember it.



UNACCOMPANIED MELODY—THE "PRINCE OF WALES" SONG.



"HIAWATHA'S DEATH SONG."

The words mean: "The ship sails away in which I embark to meet the chief, the great woman-chief's son. I shall return in the ship when the ship sails back."

Most Ojibway melodies are short, confined to what the theorist calls the simple period, which is sometimes of the white man's conventional eight measures, but quite as often of six, and not rarely of ten. There are seldom words enough in a song to fill out the shortest melody without repetition, and in very many songs the singer, rather than repeat the same words over and over, fills out the line with meaningless syllables. The favourite syllables for this purpose are "Heyah, heyah," and they may occur after the significant words, or before them in the manner of an introduction; and in some instances the significant line is actually interrupted to bring them in for the evident sake of preserving the rhythm of the melody.

The songs have rhythmic peculiarities that are sometimes disturbing at first to the white man, as, for example, the alternation of 3-4 and 4-4 time in "My Bark Canoe," and the frequent appearance of 5-4 measures. Indeed, the 5-4 rhythm is a favourite of the Ojibways, some of their songs adhering to it from beginning to end. These peculiarities are due partly to the accents of the words when used in ordinary conversation, the Ojibway composer not quite equalling his white brother in the freedom with which he mutilates language; but they arise more often from a novel perception of melodic relations, and they constitute an important factor in making the songs distinctive—that is, different from those of any other people.

I am including in the examples given herewith the noblest melody in the entire collection, "Hiawatha's Death Song." It demands a word of explanation. Some of the legends of the Ojibways have been made known to all the world through Longfellow's poem, "The Song of Hiawatha." In the Indian play based on the same legends, and performed by Indians only, this death-song is used as the final utterance of the prophet to his people when he departs for

> The islands of the Blessed,
> To the land of the Hereafter.

For that purpose the word "Hiawatha" has been introduced into the song in place of the Ojibway name that stood there originally.

I have harmonized this and other songs, partly to interpret them in the same spirit with which I seek to express the full meaning behind the Ojibway words, and partly to make them available for white singers. No words of mine can make them appeal if they do not win their way by their own strength, and I suspect that they will always give greater delight to those of us who have been so fortunate as to hear them on lake and in wilderness, their strains, now majestic, now imbued with pathos and tenderness, appealing to us as the yearning cry of Mother Nature, who would call us back from the artificial life of the city to the simple ways of the forest.

Am. Anthropol. Vol. 33, No. 2.
April-June 1931.

~~the number of valuable drugs, such as cocaine, which first were used by the primitive medicine man.~~

~~E. M. Loeb~~

Musik des Orients. Robert Lachmann. (Breslau: Jedermann's Bücherei, Ferdinand Hirt, 1929. 128 pp.)

In the musical section of the Jedermann's Bücherei, a growing number of valuable little monographs is being published, most of which are of interest also to the student of cultural history.[1] In the present volume Dr. Lachmann, known for his original studies of the music of Arab North Africa and of the Japanese Nō[2], has furnished an excellent introduction to the study of Oriental music. The need for such a comprehensive treatment of the music of the great Oriental cultures has been long felt and our present knowledge of the subject is sufficient to warrant a comprehensive treatment. But hardly more than the most general features of Arab, Hindoo, and Southeast Asiatic music have been investigated so far. Strictly scientific methods were introduced into this study only with the first physical-acoustical measurements on exotic musical instruments by A. J. Ellis[3] and with the objective reproduction of vocal and instrumental music on the phonograph.

No doubt, in the writings on music and musical theory of classical Chinese, Hindoo, and Arab literature, most valuable material has been preserved and made the object to study long since, by linguists and students of literature primarily. But musical theory, as any other, represents often a retouched image of the state of matters, viewed from specific angles when organizing the subject-matter into the theoretical system of representation. These angles are never wholly identical with the angles of chief interest of the investigator, nor are they ever known to him entirely. Classical Oriental theory of music leaves without mention many essentials, either because they were "understood," too obviously implicit in the system, or because one was not aware of these essentials. We hear about the officially recognized music of the urban cultured class, but little about the "folk music" of those periods. Finally, in Oriental cultures, as in so-called primitive cultures too, music is not as free of connotative meanings of a social or religious nature as it has become with us. The tones and modes recognized in musical theory were brought into accord with cosmical agencies and the mystical properties of the planets. The tuning of musical instruments and the resulting tonal structures were to a certain extent determined by the symbolic values of the numbers or by units of measurements taken from other realms, sanctioned there by prolonged use and by mythical derivation.

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[1] See especially the volumes Die Musik des Altertums and Die Musikinstrumente, by C. Sachs.

[2] Die Musik in den tunesischen Städten. Archiv für Musikwissenschaft 5 (Leipzig), 1923. Musik und Tenschrift des Nō. Bericht über den 1. musikwissenschaftlichen Kongress der Deutschen Musikgesellschaft (Leipzig), 1926.

[3] Proc. Roy. Soc. London, 1884; Journ. Soc. of Arts, 33, 1885; Appendix 20, K in Helmholtz, Sensations of Tone, 2nd ed., London, 1885.

Philosophical and mystical speculations have to a great extent shaped musical theory and systems, they have led the trend of stylistic development and conditioned esthetic evaluation. Hence, a most valuable instrument as it is, and a significant document by itself, classical Oriental musical theory had to be elucidated by modern research rather than taken as a guide to be followed blindly.

The technical details of the history and nature of Oriental musical systems are too involved to permit even of a cursory treatment at this place; the interested reader should refer to Dr. Lachmann's scholarly exposition. Instead, it may be sufficient to point here to some of the questions that bear methodological significance. Such is the question of the absolute pitch of musical instruments, which has been given much attention by von Hornbostel.

In purely vocal music, absolute pitch (on which a song begins) is not accorded any importance. In consequence it varies from song to song, from singer to singer, or between renditions of the same song on different occasions. It would be also difficult to keep this pitch constant. But on musical instruments (especially with fixed pitches), absolute pitch can be standardized and also further preserved, if the attempt is made to make all instruments of a certain type of a standard size and structure. This may be achieved either by copying old models when making new ones, or by utilizing standard norms of measurement. The reasons for preserving a certain absolute pitch are purely cultural. In Oriental cultures, the tone (and its absolute pitch) is preserved so as to leave intact the purity of the connotative meanings which were accorded the tones, and the measures of length by which the tones were defined.[4]

In two distinct cultures, standardized norms of measurement will be, as a rule, different, and so will be the standard sizes of musical instruments and their standard musical pitch (if these should be made uniform at all). But if, in distinct cultures, musical instruments be found, the absolute pitch of which is identical (that is, the pitch of the tone from which the tuning of the instrument progresses) within the bounds of the error of measurement, this will suggest that the agreement is due to cultural connections. The number of possible choices when selecting a certain standard pitch for the starting point of the system is so great as to render the possibility of accidental agreement exceedingly small. The material or the shape of the instrument does not limit these possibilities of choice. Only the size of the instrument may have an approximate upper and lower limit, to permit the instrument to be handled with sufficient ease. There are no physical or psychological reasons for preferring a certain pitch, nor is any factor present in the musical system itself (that is to be materialized on the instrument) that would call for a certain absolute pitch as starting point. The only factors, then, to which the agreement can be due, are cultural ones. The great number of possible choices renders independent origin very unlikely; the absolute pitch of the instrument was probably diffused together with the instrument's standard size and measurements, and is now preserved.[5]

[4] The basis of the Chinese tone-system is the tone given by a panpipe reed of 230 mm. length; this length constitutes a Chinese foot-measure. (See p. 19 of the book.) The norms of measurement were carefully corrected every year in China, in order to "assure harmony with the order of the universe." For further data see the reference given in footnote 8 of this review.

Among the cases that von Hornbostel has found so far, one is of especial interest to American anthropology: the agreement of the absolute pitch of panpipes from northwestern Brazil, prehistoric Peru, and the Solomon Islands in Melanesia.[6] (At this latter locality at least, we know definitely that new instruments are made by carefully copying old ones.[7]) The circumstance that also the musical system based upon the ground-tone (and even the technic of tying the pipes in rows) is the same in all three cultures, only strengthens the case. But the identity of the *pitch* of the starting tone of the system is the salient point, which is overlooked sometimes. The identity of the musical system, by itself, does not necessarily imply much of consequence, since acoustical principles on which the tuning of an instrument is based, may be easily discovered independently.[8] More recently, von Hornbostel has arrived at the conclusion that the length defined by the absolute pitch of the basic reed on these panpipes agrees or is in undeniable connection with the classical Chinese and Babylonian foot-measures.[8]

The absolute pitch of the basic tone in an instrumental tonal system (and with it the level on which the system is placed) is musically an unessential datum, it is not startling then, that it is defined by factors extraneous to the musical system and even to the musical realm. More unexpected is the conclusion to which recent investigations (chiefly of von Hornbostel) lead: The structures of Oriental musical tone-systems, based in first place upon the physical-acoustical laws of the musical instruments (and not upon preferences of certain melodic or "harmonic" qualities of successive intervals), are in second place established by utilizing factors extraneous again to the musical realm.[9] The successive distances of the subdivisions of a string where marks are placed at which the string is shortened in playing, or the distances between the fingerholes of wind-instruments, furnish relations which have their origin obviously in mathematical speculation and in the subdivisions of measuring rods, but have no primary connection with strictly *musical* requirements. Musical tendencies may be strong enough to cause corrections and additions only to the system. But even these preferences may in part go back to habits acquired through the use of other, in origin similar, instrumental tone-systems, and in part only to melodic habits established, let us say, during the evolution of the unaccompanied vocal music of the same culture.

[5] Von Hornbostel, Ein akustisches Kriterium für Kulturzusammenhänge. ZE, 43: 601ff., Berlin, 1911.

[6] Summarized in Ein akustisches Kriterium, etc.

[7] Von Hornbostel, Die Musik auf den Nordwestlichen Salome-Inseln im Bismarck-Archipel. *In* R. Thurnwald, Forschungen auf den Salome-Inseln und dem Bismarck-Archipel, 1: 482 ff., Berlin, 1911.

[8] Von Hornbostel, Die Massnorm als kulturgeschichtliches Forschungsmittel. Festschrift P. W. Schmidt, pp. 303–321, Vienna, 1928.

[9] Summarized in von Hornbostel, Musikalische Tonsysteme. Handbuch der Physik (ed. by H. Geiger and K. Scheel), 8: 425–449, Berlin.

By comparing the systems established on various instruments and further attempting to bring all of these into a mathematically and logically satisfactory harmony, Oriental musical theory has finally progressed to a complexity with which musical practise does not cope any longer on all points. The tone material that the musician is given by his instrument is too abundant and he must select certain combinations. This leads us to considering the mode-concept, in contrast with our scale-concept.

In India, a certain piece of music or a song stands in a certain *rāga*, in Arab music in a certain *maquām*. An analysis of a number of songs said to belong to the same rāga (or maquām), shows a considerable amount of variation in the tone-material of the single songs, although certain tone-combinations, or rather, certain melodic turns recur from song to song. But setting analysis for a while aside and merely listening to the songs, it soon appears that common to all songs and thus characteristic for the rāga is a certain shape or outline of the melody (the "Gestalt"), which can be covered only partly by describing it in terms of preferred tone-combinations. And such are exactly the conditions that prevail in primitive tonality too, only that the theoretical superstructure is missing there.

Taking tonality (of a song) as a system of interrelated melodic functions and the actually occurring intervals as bearers of these functions, an interval cannot be taken as an entity of independent existence. It is present only as a unit of the contextual structure and, in addition,—should this structure be taken in abstracted conception as a system—also as a point in which reference taken to this system is vested. On this basis some distinctions can be made. In *primitive* melody the shape that the functions assume (the actual extent of the intervals) possesses great flexibility. There is no underlying theoretical tone-system of reference from the fixed subdivisions of which the intervals must be chosen. Thus a certain amount of variation in the intonation, from which the investigator must abstract what he will consider the system implied even if not established. In Oriental melody (especially in Hindoo and Arab music: rāga and maquām) underlying tonal systems of reference have been established. In consequence, it is not variation of the appearance of an interval that satisfies the varying contextual setting, but the substitution of one interval for another, both being still expressive of the same melodic function. In Occidental music finally, the substitution of one interval for another, in varying context, implies at once also a change of harmonic relations. These latter constitute by themselves a second, additional system of reference which has grown even at the expense of the primary, melodic medium;[10] pure melody is present no more.

Common to primitive and Oriental music is the flexibility in expressing melodic functions. From this aspect must be understood the variations of intonation in the first, which are often interpreted, not quite justly, as due to a rudeness of the standards and of the technic of the intonation. The rāga and maquām concepts, on the other hand, are the result of a compromise between the primary aspect of melodic

[10] Especially so since J. S. Bach's compositions and the contrapunctic development.

flexibility and the cultural achievement of defined, established tone-systems. The very same flexibility is still found in the modes of early medieval church-music and is preserved in older layers of European folk music, or, in a more free form, in the recitation of the ritual in the Catholic and Jewish churches. In these Western forms, then, the melodic principles are still preserved that are functioning in primitive and Oriental music. All such forms that are based upon melodic flexibility, may be considered also as being based upon *modes*. In comparison with such forms, *scale* in our sense is a melodically much more limited concept, fixed into its rigidity by the constant references to a secondary system, that of harmonic relations.

Dr. Lachmann devotes in his treatment one chapter each to tonal systems, scales, melody-types, rhythm, polyphony, and music as a cultivated art in its social and conceptual setting. Within these headings, four culture complexes are treated: China and Japan, Farther India and Malaysia (Java and Bali), India, and the Arab-Islamic culture from Persia to Morocco. A selected bibliography, comparative time-table, valuable musical examples, and a few pictures complete the treatment. The musician, anthropologist, and psychologist will peruse this little volume with gain.

GEORGE HERZOG

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NEW PHASES IN THE STUDY OF PRIMITIVE MUSIC

By HELEN H. ROBERTS

WHEN we attempt to study art, or especially to describe an art to those unfamiliar with it, we find that, while it is comparatively easy to discuss colors, materials, and subjects, a brief and satisfactory characterization of its style is exceedingly difficult of accomplishment. Yet it is this very style that so completely distinguishes the work of one artist or group from that of another, much more than employment of pigments or other materials, or subjects chosen for expression. Exactly the same condition exists in music. All the arts have certain features in common, in that they are supplied at the outset by nature with certain working materials and it is quite possible that over wide areas the same or very similar elements may be encountered. But it is the way in which the artists play with the material that is furnished that gives us the styles, and it seems to me that the most important of the plays is not the selection from the mass of materials of those which the artist favors, for usually all that are available are chosen at one time or another, but the patterns or designs that the artist creates from them.

When local styles become sufficiently fashionable and fixed they form types. They may be the result of the acceptance by many of sudden departures from other types (and I think this fact is not often taken sufficiently into consideration), or they may mark the gradual accumulation of lesser divergences. This whole question of the growth of variants and the determinants of the beginnings of new styles, while recognized as important by many thoughtful students, has not, for lack of time and sufficient material from which to draw, been as yet adequately studied. Nor do we always detect the influence of religion upon art-endeavor, which has too often resulted in its marked restraint or warping, a fact not only evident in primitive arts, but even in classical arts and in that of Christianity.

ing the cassiterite ore found associated with copper in the lodes in Bolivia.

When native copper could be found, and tin obtained from the easily reduced cassiterite ore, it is not surprising that experiments should have been made in melting these two metals together in different proportions, and that the Incas should have discovered that a certain amount of tin produced hardness, and the best results in casting, and that a minimum amount of tin, with forging, annealing and cold working, yielded a suitable alloy for tools. This would explain a certain uniformity of composition in tools and objects which would not be obtained by smelting ores of unknown composition, yielding a metal of a varying, accidental and uncertain nature, although it is quite probable a bronze may have been obtained by smelting together ores containing both copper and tin when the metals themselves were not obtainable.

In conclusion I desire to acknowledge the valuable assistance of Dr. D. L. Wallace of the Chemical Department of the University of Pennsylvania, who aided me in my analyses and determinations of compounds in some of the ancient bronzes. The microphotographs were made at the Laboratory of Physics of the University.

PHILADELPHIA, PA.

Strange as it may seem, considering the prominence given by anthropologists to architecture, the plastic and graphic arts, textiles, and language, in their effort to learn of other peoples, very little systematic attention has been paid to music. Perhaps it is the most important of all the arts when it comes to revealing the history of our forerunners on this continent, since it combines direct subjective evidence of the words with the objective features of its structural designs.

In the western hemisphere most primitive music is vocal. Songs are far more important in every way as anthropological studies than instrumental music. Possibly the Indian's respect for tradition is greater than that of the American Negro, for instance, so that greater stability of songs is maintained over long periods of time. Particularly, melodic and singable tunes will survive many generations, modified, it is true, because the tendency to variation is always active, especially with people who depend solely upon memory for repetition and transmission. This variation grows with the passage of time and the number of intermediaries. So far as my experience with Indian singers goes, it has brought me to the conclusion that while a greater attempt is made to reproduce the songs exactly, and they are on the whole valued more highly than with the Negro, nevertheless there is still considerable tendency toward variation. Beyond the Indian field, even in cases where the variation is great, as with the Negroes, a song long retains enough of its identity to be recognized because of its larger stylistic features, or perhaps its more marked ones.

In song and ritual are hidden archaic forms of language, which may have been obsolete for centuries in the spoken tongue. Where, but in song, ritual, or tales would we find expression of the innermost thoughts of the people, inadvertent references to the minute details of daily life, the expression of religious beliefs, preserved in a form which is more or less stable throughout long periods, combined as in song with an art form which may afford material for comparative purposes?

We may observe the effect of music upon language and vice versa, if we also know the spoken tongue, and where the music has attained something of a formal character because it is appre-

ciated for its own sake, interactions between the two within the songs themselves afford very interesting study. At times the music is woven almost inextricably with the texts, and seems a direct intoned expression of the thought, but quite as often it reveals an appreciation on the part of the composer of its own artistic value and has been developed on its own account. One of the chief values of a study of primitive music lies in the fact that, at least in central North America, it accompanies practically every activity of any significance. Whatever phase of the life of the people we choose to study, we find additional light through the songs which have come to be associated with it. If we would learn of origins, growth, and change in the various institutions as well as their journeying from region to region, we have in the songs not the least useful of our evidence. Any tune is sufficiently complicated to preclude the likelihood of its having been invented twice, especially since the limits of possibility in musical invention are so great, and where instruments play so insignificant a rôle as they do in North America. It is easy to see that instruments of limited range, if used constantly for accompaniments, might affect the development of song.

In Indian music we may observe a great medium of human expression through an utterly different world of thought. From the standpoint of design and structure, as well as of melodic combinations and rhythms, it is in conception markedly and refreshingly different from our own, steeped as it is in rules and precepts so respected, in forms so stilted, or tonal groups so monotonous, that it was not until comparatively recently that composers who infringed the laws laid down by the classicists were accorded more than derision and scorn. Here we must accustom ourselves to new forms and tonal groups, to irregular metres, depending directly upon the accents of the word phrases, as a rule, and thus so simple and natural that we are amazed that we have not seen the beauty of the irregularities before. But the Indians also have rules and canons for certain types of songs, although they may follow them more instinctively than rationally. Not seldom for these the music follows characteristic lines, partly due to the structure of the ritual poetry, and

perhaps these musical types have the most important value for us of any when we are tracing the history of different activities, ceremonies, religious societies and the like.

Miscellaneous songs afford the poorest means of tracing contact because they have usually been inspired by single occasions which have no appeal to others than those actually participating and because they are usually individually, not tribally, owned. They are apt to be borrowed singly, by single individuals, and may become easily lost or difficult of discovery in new surroundings where a collector might not readily divine the circumstances necessary to call them to memory. On the other hand these little single melodies often have great individual charm and are direct expressions of the small incidents in daily life.

Songs which are the property of religious or medicine societies, and which form ritual groups and are sung in their entire cycle with each recurring season or meeting, are always regarded as important by the people themselves, are carefully remembered, and are very often similar in general outline for a given ceremony, in a way which the people themselves recognize even if they do not analyze clearly. Owing to the fact that most tribes have ceremonies which find more or less rough correspondents among other tribes it is easier to find what these are and to draw comparisons between their songs than with miscellaneous songs. Because of a conventional and even holy character, there are likely to be fewer changes in the successive renditions, while an almost universal custom in performing rituals, which consists in much repetition with variation only on significant phrases which mark the steps of the ritual, serves to fix more firmly in mind the form in which the ritual is cast, both as regards tune and words, rendering detection of error in performance more likely. Thus, by means of individual melodies, but, better still, by means of the stylistic features of groups of songs, we may be able to follow the histories of innumerable practices which in tribal life have songs associated with them. Already steps have been made in this direction, limited, it is true, because the collections so far assembled and transcribed are generally of such different types of songs that not many comparable groups are available for study.

We do not perceive the smaller differences in song, however, either in local or tribal types, such as those which characterize different ceremonies, unless they are revealed by analytical study, partly because of the strangeness of the music to our ears, partly because of the subtlety of the art itself, its movement, and its evanescent character. The mechanical means of fixing music were invented rather late in its history in Europe and not at all in many parts of the world, while even now when we have a notation and phonographic records which to a degree permit of audible fixation, to appreciate not only its form but its beauty involves progression and a continual comparison by means of association and memory.

Not only is it difficult to seize upon and designate the peculiarities which distinguish certain types, upon hearing the song, but in reading over the notation they are not all equally clear to a musician, who must needs reduce the music to some simple formulae covering the structure, etc., in order to have them clearly in mind. Such a reduction is even more necessary for those whose unfamiliarity with the symbolism of printed music renders the subject still more complex. For the sake of obtaining the bald outline of the tune and the design which it formed, structurally, it seemed best for the time being in analyzing given songs to eliminate key signatures, musical notes, with their different values, all pitches less than whole step intervals, all measure bars and accents, all expression marks, in fact everything that might be considered to belong to the realm of color in music, much as one might omit questions of technique, color, materials, in basketry, painting, textiles, or pottery in order to see the outline of the decorative designs which cover the surface, only in this instance the designs are the structure itself, the form of the object.

This was accomplished by plotting the tunes on quadrille paper, somewhat after the manner followed by Miss Densmore in her "Teton Sioux Music." The writer received the suggestion from reading her book, but whereas in that study Miss Densmore was interested solely in the trend of the melody, its form of beginning and ending, for which it was sufficient to plot only the first note

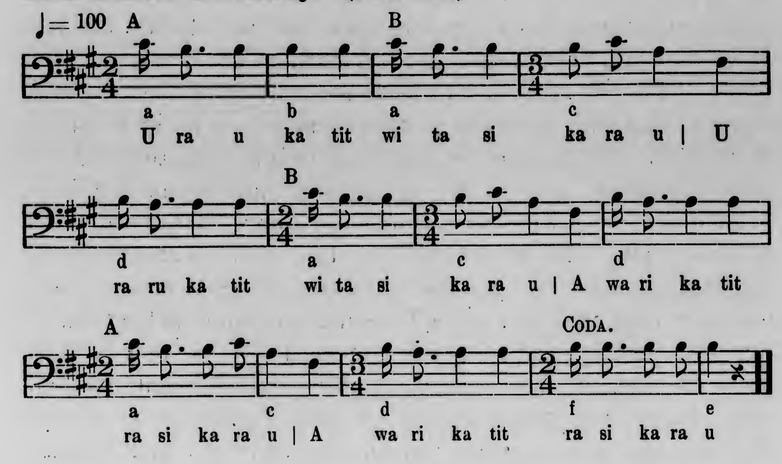
of every measure, in the present instance the same device has been made to show the duplication of parts with the aid of letters, their recurrence in different sections of the melody (at times on different octaves with the aid of heavily ruled lines for tonics) as they would be designated in our music. Every beat is represented by a vertical line of the quadrille paper, and except for rests a dot has been placed on the appropriate horizontal line according to the note occurring on the beat in question. No use is made of spaces as in music, but every horizontal line represents a diatonic scale tone, and every eighth one is heavily ruled to represent the tonic. Thus for musicians at least the relation of the tune as a whole to this tonic indicates at once whether it is major or minor in tonality. By means of the plot the tune is reduced to the barest possible outline, and instead of requiring careful reading from beginning to end, as in music, shows at a glance the structure and general plan. The advantages of this quick survey are of inestimable value when comparing large numbers of songs. Letters have been used to mark off the different musical phrases, so that the student need not even stop to see where new phrases begin; in fact, this would not be easily apparent without them. Once the plots are made it does not need a musician to understand the plans of the songs and to see points of similarity and difference in their structure.

One instance of an attempt to study groups of ceremonial songs by means of their structural and stylistic features has already given some interesting results. Having analyzed the songs for a large group of ceremonies belonging to the tremendous Creation Ritual of the Pawnee, the writer discovered that what her Indian informant naïvely expressed as a "different voice" for the songs of each ceremony actually existed to a degree. In a number of cases the groups did conform to a rather well-defined pattern or design of composition, and certain peculiar stylistic features which are hard to describe off-hand gave them on the whole a similarity in sound which made it easy for one who had ever heard enough of them to become acquainted with the style, to recognize one of the type, even if not familiar with it as a specimen.

A few examples will illustrate these differences in structure as

well as the usefulness of the plot for this comparative work. Not all of the ceremonies are differentiated by completely individual types of songs and not one is lacking in examples of songs which are untrue to type and which have even been taken in theme from the songs of other ceremonies, but for some of the groups one type predominates which becomes fairly distinctive.

Skull Bundle Ceremony. (Pawnee.)



In the earlier ceremonies, which are by tradition the oldest of the group, no well-defined types are found. In the Skull Bundle Ceremony, however, the songs are mostly very simple and of fairly limited range. The ceremony is very much older and more sacred than the White Beaver which has a very clearly defined type of song. Age shows, I think, in the very archaic character of the tune given here. A measure analysis is inserted under the notes, consisting of letters which change with the motifs used. The frequent recurrence of the same letters shows how often the same little melodic ideas are employed. The Skull Bundle songs are a miscellaneous collection from remote antiquity. The example given above is merely by way of contrast with some of the songs of the later ceremonies.

It is at once apparent how the plot given below clarifies the structure of even so simple a melody as this. Here are revealed

three identical portions preceded and followed by short sections which may be called either A and coda, or Introduction and coda. The ascending ending on the second degree of the scale is easily seen, and the general placement of the melody in relation to the tonic or key-note. There are several Skull Bundle songs with ascending ends, and throughout the ceremonies there are quite a number more, which fact might be observed by those who like to insist that Indian songs always descend in trend and drop at the end.

Fig. 9 gives the plot of the above melody.

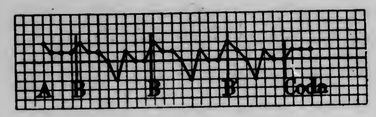


FIG. 9.

The Morning Star Ceremony is another very old and sacred ritual and, like the Skull Bundle ritual, is composed of songs of

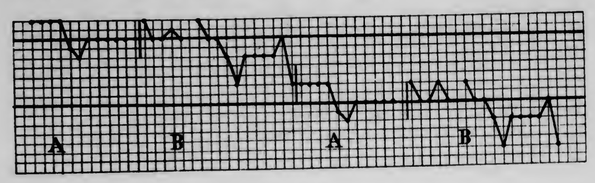


FIG. 10.

more than one structural type. One like that shown in the plot (Fig. 10) is very prevalent, however; in fact so much so that it may be said to characterize the songs of the ceremony. It is what I have called the "octave type" because we have a melodic theme which is reproduced on the octave below, and, if the song begins high enough and the singer's range will permit, is repeated a second time on the second octave below. Necessarily, the two factors of initial pitch and singer's range influence the structural features to some degree, but do not control those that enter into the original part on the highest octave. Octave structures are found in two or three of the other ceremonies but so rarely that they are plainly not typical of them, whereas in the Morning Star Ceremony they furnish the great majority.

Another type found in the same ceremony reminds us of the Skull Bundle songs except that it is possibly a bit more complicated (Fig. 11).

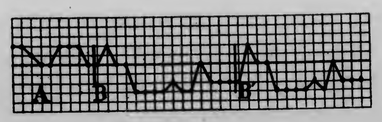
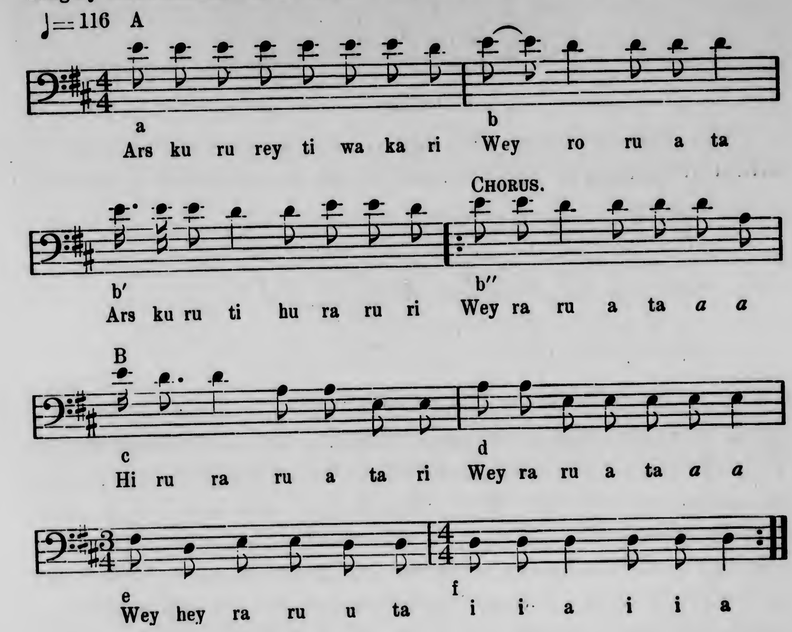


FIG. 11.

White Beaver Ceremony. (Pawnee.)

Sung by Good Buffalo, No. 6 North. First Ceremony, Second Song.



This White Beaver song, from the ceremony of the same name in the Pawnee Creation ritual, written out in full notation and accompanied by its musical analysis, will give an idea of the peculiar structure of the songs of this group and likewise show the advantage of the plot device in rendering it visible at a

glance. As far as the repeat marks, or to the double bar at the end, we have the verse proper, which consists of two sections, A and B, of four measures each, quite regular and correct from the standpoint of European standards. But part of the song is repeated for the chorus, as the informant called it. For this the return is not made to some natural division in the music such as at the beginning of the A or B phrases, but to the last part of the A phrase, after which little introduction the B phrase is repeated entire.

This peculiarity in the formation of the chorus appears in some form or other in practically all of the forty-eight White Beaver songs, depending on the composition of the verse proper. A number of variations in the manner of introducing the chorus are found,

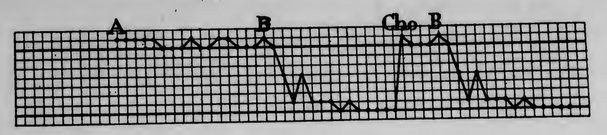


FIG. 12.

such as taking for the measure or so, which serve as introduction, material from some other part of the A phrase, from the first part of the B phrase, after which it is given in full, or by substituting new material, and so on. At times the chorus is introduced directly without the intervening connective. But these occasions are comparatively rare. Usually there is a return on beginning the chorus, to the middle of some phrase. Another peculiarity is the long level ending at the close of verse and chorus, and the great skip between the end of the verse proper and the opening of the chorus. There are several other minor features which are fairly characteristic of this group of songs, such as the play between the second degree and the tonic, and the two little rebounds in the melody after the first big drop in the verse and again in the chorus.

The plot (Fig. 12) makes the whole structure evident at a glance. It is given in full, whereas the music for the chorus is indicated by repeat marks.

The songs for the remaining ceremonies of the ritual are more or less like the White Beaver in general plan and seem to have been taken from this ceremony as a pattern.

It was quite by accident that, in turning the pages of Miss Densmore's "Teton Sioux Music" during the time that the Pawnee songs were being studied, the writer recognized in the plots of a few songs that Miss Densmore had given some that show the very design that pervades the songs of the White Beaver Ceremony and which is so peculiar in itself that it had been a source of more than casual speculation and study. This structural type is by no means common and considering the number of types that do exist and the fact that the range of possibility in



FIG. 13.

musical design and structure is almost unlimited it seems very significant that these two identical patterns should be found in the ceremonial songs of two medicine societies which belong to tribes of different linguistic stocks. It at least throws in more favorable light the proud boast made long ago by our Pawnee informant that the Sioux derived the idea of their medicine societies from the Pawnee. Had the writer been glancing through the music of both ceremonies in the same casual way in which she observed the plots, she might have felt that she had heard something similar before, but recognition would not have occurred as promptly, if at all, without the analyses and the plots as identification, especially as the actual melodies which conform to this structure are often quite distinct.

The above plot of one of Miss Densmore's songs (Fig. 13) represents a Buffalo Medicine song.[1] Not all of the group which Miss Densmore gives follow this pattern, and it is probable that in any ceremony there are exceptions, but this type, more or less modified,

[1] Frances Densmore: Teton Sioux Music (Bull. 61 Bur. Am. Ethnol.), p. 250, song 80.

is characteristic of the majority. There is one small difference between them and the Pawnee songs. In repeating for the chorus the Pawnee songs usually return at once to the highest note and this is usually the same as the first note of the song. In the Sioux there is an intervening note which serves as a step between the lowest and highest notes which would otherwise be separated by a great interval, but, since this lower note is also present in the A section, the principle of returning to the middle of the A phrase for the chorus remains unbroken. The introduction to the chorus, as I call it, is in the Sioux examples proportionately a little longer.

Probably enough examples have been given to illustrate the points that I have been trying to make, namely, that our study of Indian music must not be confined to the smaller details of artistic endeavor but must include the larger underlying plan to which these are attached as color elements or surface decoration, if the simile is permissible. The plots, in ridding us of the mass of confusing detail that obscures this plan and best of all in eliminating the musical symbols which are even now a great hindrance to clear understanding on the part of many people, will fill a long-felt want in furnishing a quick means of comparison and at the same time enable us to see the pattern without the progressive reading that is necessary with musical notation.

It is not claimed that the analysis of music from the formal side is the only one which counts in the characterization of style. It is quite as important to look for characteristic rhythms, scales, intervals, ways of beginning and ending, etc., as it was before. Color styles are quite as important as structural styles, but not more so. And never should the latter have been so completely overlooked by the students of primitive music as they seem to have been.

The principle of musical analysis that precedes the graphic presentation of it by means of the plot is employed by students of classical composition everywhere. There is nothing new in the division of a composition into motifs, sections, phrases, sentences, etc., but strangely enough students who have hitherto examined Indian music have never, apparently, worked at it from this angle, either failing entirely to see it, or sensing it only vaguely, unless,

indeed, they have taken it for granted that it would be patent to every reader; to which I offer the opposite opinion that it would not be evident even to musicians without a little study, since it can not readily be perceived in the process of progressive reading or hearing, while the non-musical reader would not perceive it at all. In my own work hitherto, the musical notation has been the chief difficulty in the way of presenting the subject in a manner intelligible to the average reader, even with the aid of phrase lettering. The plot removes this once and for all.

In concentrating solely on such problems as off-pitch singing, tonality, weak or strong beginnings, rhythms, size and frequency of intervals, tonics, high and low beginnings and endings, etc., it seems to me that students have failed to see the forest for the trees. Especially is this the case with off-pitch singing which is subject to so many almost unmeasurable conditions that it seems doubtful if we shall ever be able to deduce any laws concerning it. When we realize that many of the songs which are the material for our study are taken from old people who are supposed to know the songs best, but who also at the same time have the poorest pitch control, and when we think of the enormities committed in the direction of off-pitch singing among our own trained singers who should know better, the difficulty of the whole question begins to be apparent. There has been no attempt to measure the conditions under which the singing of the songs occurred which we accept as material, nor the variations that would occur in several renditions by the same and different singers, as well as the limits of ability to identify fine pitch differences on the part of the transcriber. On the whole the importance of the question of off-pitch singing seems to me to be much over-rated particularly in music where instruments are rare.

Many of the other points that have been investigated are, by their very nature, common over large areas, and those like rhythms begin to be important for our purpose only in the more complex combinations. The entire rhythm of a song, on the other hand, is so complex that it is practically never duplicated in another tune, as the following experiment will prove. One has but to tap out the note values of any song that others are apt to know to find

how readily the tune is recognized by those who have a reasonable rhythmic sense, even though there is no melody present. The melody alone, without its own rhythm, may be easily passed by, although very familiar, if given with absolute time regularity. But, if plotted, its similarity to other melodies constructed along the same lines will be at once apparent.

Investigation indicates that a tendency toward structural patterns does exist, especially in ceremonial songs, just as it does in totemic complexes, social organization, religious societies, graphic art, architecture, etc., and varies all the way from extremely simple combinations to very complex structures of design within design as in one of the Pawnee songs where there is chorus within chours. Just how extended this tendency is remains for future study to disclose, but the mapping of it and the use of it for comparative purposes certainly seems worth the effort. The results cannot be predicted at the present time, but there seems to be no reason why the principle of structure in music should not offer as certain a means of identifying different groups as the corresponding situation does in basketry, pottery, textiles, or any other phase of culture.

It seems advisable before closing this paper to make a few remarks on Indian music in general in response to repeated inquiries whether it were not possible to characterize it in some way. Some persons of considerable musical standing have, without any very profound knowledge of it, condemned it utterly as hideously lacking in melody, form, and variety. Only those who will take the trouble to study it can know of its often very beautiful melody, its surprisingly intricate forms, unappreciated by most of us because we are so fettered by the traditions, rules, and regulations of an art which with us came near falling into a rut. One of the features most enjoyed by those whose long acquaintance with Indian music makes it possible not to feel lost at every change of interval relationship (or key as we know it) or at constant shifts in metre which nevertheless combine themselves into form, is this remarkable freedom of expression.

When we consider that there are nine great culture areas in North America as they have been mapped out by students of the

subject, and that in each there are many local centers of style and structure for basketry, pottery, textiles, forms of dwellings, and so on, and when we recall the number of distinct linguistic stocks, is it fair to demand that the music of all shall be crowded, whether it will or no, into one great generalization? Asked to do this of graphic art, textiles, or languages, the anthropologist would stand aghast. So far as investigations have been made, they have hardly extended beyond the confines of single tribes scattered here and there. No systematic effort has been made to completely survey the music of an entire culture area, much less to compare that of each of the areas one with another, and from this comparison to draw a general conclusion. The work has so far been too vast and the points about the music which have been taken for discussion too numerous and dissimilar with different students.

More often the studies have been confined to certain types of songs within a given tribe, and not to a general presentation of the music, and naturally the first condition should precede the latter. There are some notable examples of the thorough musical canvass of certain tribes, such as Miss Densmore's Chippewa and Teton Sioux music, Miss Fletcher's Omaha, and Gilman's and Miss Curtis's work among the Hopi. But even with these there is still not enough for generalizations that might be taken as final. Burton has attempted a few, and I shall largely be repeating what he says, but I can not agree with his point of view that Indian music as yet is unformed and if left to itself would eventually have worked its way into the condition of European music, with its even, two-and-two balancing of phrases, its stilted forms, and its harmony. Indian music is unformed only as is any living thing which still has time to grow.

That Indian music would have evolved along the same paths as other music is an unjustifiable assumption—quite as much so as to say that the languages with constructions which reveal an entirely different way of looking at things would necessarily come to such a complete overthrow of systems as would be inevitable in order to arrive at the *modus operandi* of the great Indo-European language system.

Sounds, accents, and rhythms may, by their very nature, be

more or less common property the world over, but it is their combinations into structures that are individual.

First of all it may be noted that as far as investigations have gone we have found Indian music to be practically monophonic, even the choruses being sung in unison by men and women if we disregard the octave factor existing between their voice ranges. There seem to be more songs in major than in minor, and they are most of them quite short and contain very few ideas, poetically or musically, but these few are often elaborated in quite intricate ways, showing an appreciation for extensions, contractions, inversions, and other devices known to European music, although in some Indian areas they are very little employed. The songs vary from the simplest structures to those which are quite complex, and some tribes are markedly poorer musically than others. The music of all of them has this feature in common with that of primitive peoples all over the world: instead of new ideas being developed and added to others to make longer compositions, recourse is had to numerous repetitions of a few short themes.

As has already been said, there is great freedom of expression which excels any that is known to European and American music except within the last decade or so. It is rare that songs of perfect metric regularity are encountered or phrase balancing such as classical rules have prescribed. We might describe it as a music where there are no rules, except that the songs of a certain ceremony have a tendency to follow the same structural idea.

It should always be remembered that composing songs is a general practice among Indians. It is not confined to a few specially gifted members of a tribe. Everyone sings and has his own songs, although some are recognized as being better composers and performers than others. That all the individuals who add their efforts to the tribal output should be equally gifted not only with pitch discrimination but with musical taste one could not for a moment suppose. Such a demand would be rather heavy on ourselves. That is why in the vast mass of material that is collected the real gems are comparatively rare. The same condition would be found with ourselves even if we collected only from professional musicians.

Nevertheless, huge as is the task of collecting and sorting; slow, painstaking, and tedious as it must be if it is to be done scientifically and correctly, the doing of it not only achieves the ends outlined at the beginning of this paper, but enlarges our vision and enables us to see the real contribution the Indian has made in this field.

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American Indian Music

THE IDEA

WE have so long taken it for granted that the songs and folk music of the Indians were without genuine musical value, that now that the contrary is established beyond a doubt, it requires a moment of mental effort for us to adjust ourselves to the idea.

In the light of the splendid ethnological work of the past fifteen years, no one doubts any longer the force and value of the Indian in his arts and crafts, his designs, his legendary and mythical invention. And finally we discover his music and learn that here too he has a vast and unexpected legacy for us. The little that we have previously heard that is truly representative of Indian song has long deceived us as to its real nature and extent. And our indoor musical culture has led us to overlook this outdoor music of nature, of plain, forest and sky.

The Indian sings songs of unlimited variety and scope of human feeling—stirring songs of the Thunder God as he prepares to meet his enemy, peaceful chorals in the circle of his friends, weird melodies to reach the spirits of the departed, rallying songs in the face of death, rhythmic and jubilant songs at his games,—innumerable plaintive, quaint or thrilling chants not trimmed to the measure of the musical theorist, but sung from the earth to the sky, from men to men in the open, and to the gods above.

As significant for us as this realization is, at the first, we have already taken a step beyond it. For our American composers have awakened to this opportunity afforded for a new American musical development, and are weaving these myriad Indian rhythms and melodies into many fanciful musical compositions, both vocal and instrumental. And already these composers have won recognition for this work from prominent musicians, authoritative writers on music and from music-lovers generally, as a definite and vital movement in the development of a National American Music.

THE WORKERS

A number of ethnologists and incidental students of the Indian have already collected and made available thousands of Indian songs from many tribes. Among others who have touched this field of work, those composers who have chiefly given their attention to the development of the Indian music are Carlos Troyer, of San Francisco, Arthur Farwell, organizer of the Wa-Wan Press, Newton Center, Massachusetts, and Harvey Worthington Loomis, of New York.

THE MOVEMENT

The Wa-Wan Press, at Newton Center, Massachusetts, is the nucleus of the movement for American music. It publishes only the works of American composers, especially those who are devoting themselves to the development of native American folk-song.

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THE MUSIC OF THE ZUNIS

Professor Carlos Troyer, composer and *savant* in the musical sciences, has through his personal experiences with the Incas of Peru and the Zunis of New Mexico, made some of the most valuable contributions to Indian musical development. His friendship with Frank Hamilton Cushing led him to visit the Zunis, probably the most reticent and uncommunicative of all the Indian peoples, but through his sympathetic appreciation of their beliefs and their music he finally won his way to a knowledge of certain of their more inaccessable traditions and ceremonials. The music of these ceremonials, both vocal and instrumental, is now given out in a simple and available form, the songs bearing accurate metrical translations in English. The general character of this music is impressive and dignified, but withal simple and beautiful.

The songs are being sung with signal success and effect by such artists as David Bispham and Denis O'Sullivan, and the Ghost Dance of the Zunis, perhaps the most remarkable and striking of these compositions, met with an enthusiastic reception at its performances by the National Band at the St. Louis Exposition.

All of Professor Troyer's Zuni compositions are supplemented by descriptions of their scenic and traditional significance, and in performance a special point is made of preceding the music by a reading of these descriptions.

There is no more direct revelation of character than through musical expression, and through this music we come in close touch with the simple human feelings and the loftier aspirations of the strange "silent people," the Zunis.

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Mr. Barnhart sang "Sunrise Call of the Zunis," by Carlos Troyer, this selection being one of the most enjoyable of the morning.
Los Angeles Herald, Nov. 5, '04.

The finest and most impressive of all were the "Sunrise Call," sung by Harry Barnhart, and the "Ghost Dance of the Zunis."
Los Angeles Times, Nov. 5, '04.

it, inclosing photographs. The following is an extract from his reply:

"'I notice in the forehead a hole which is found in many of the surface faces of stone on the beach. I have in my collection just such an image. It is made of a gray sandstone; is about 10 inches high; has a low forehead, just like your image, and has also one or two holes made in the stone before it was fashioned into an image and while it was immersed at high tide on the beach. It was made at Neah bay by an Indian fisherman after the death of a native, and taken, in his place, in the canoe to the fishing grounds. Here it was lowered by a rope into the water, and was supposed to have "power" to attract fish and bring luck. I could not find that it had any other use, or that it was used in worship, or represented anything more than what we know as the dead fisherman's *tamanous* or luck. It is very similar in appearance to yours, and I suggest a similar origin.'"

This statement by Judge Wickersham, who is widely known as a close observing archeologist, is very interesting.

Am. Anthropologist, Vol. 10, No. 11, Nov. 1997

GEOGRAPHICAL DISTRIBUTION OF THE MUSICAL BOW

OTIS T. MASON

Mr Saville's note in the *Anthropologist* for August, describing the "hool," a musical instrument played by the Mayas, at Loltun, in Yucatan, adds another area to the distribution of the "musical bow." About five years ago a native Zulu negro came into my office, having in his hand the instrument described below as No. 95201 in the National Museum. He played upon it by holding the bow in his left hand and spreading his capacious mouth on the back of the lower limb. He had in his right hand a piece of twisted wire, and produced most weird and entertaining music by striking on the string therewith and at the same time changing the volumes of the buccal cavity. The apparatus interested me so much that is was bought for the musical collection and is now among our treasures.

Mr E. H. Hawley, who has charge of the musical collection in the Museum and who has given a great deal of time to studying it, furnishes me with the following material describing "musical

bows" that have come under his knowledge, some of which are in the National collection. The native name and the description of the instruments are taken from Mr Hawley's notes.

Zulu (*Samuius*). A short, flat, wide bow with one string of steel wire, gut, or vegetal fiber. In the specimen here described the steel string is rapidly struck with a double and twisted steel wire while the back of the bow is held against the open mouth, which acts as a resonator. The tones are varied by changing the capacity of the mouth. A variety of notes can be produced by this means. (Cat. No. 95201, U. S. N. M.)

Zulu (*Gubo*). Bow not over two feet long; string played by placing a loose reed against it, resting the other end against the body, and striking the string with a slender reed.

Angola (*Hunga*). Bow with gourd resonator open like a bell tied to its back. The tunes are varied by the amount of opening between the player's body and the gourd and by moving it over different parts of the stomach. The string is held between the finger and the thumb and beaten with a slender cane. (Cat. No. 151,140, U. S. N. M.)

Angola, Africa (*N'Kungo*). Bow a curved whip; string a plant fiber, with a loop tied around both string and bow. Struck with a small stick.

Damaras, Africa. Bow same as one used in war or the chase. A loop of hide or string is passed around both bow and string and drawn tight, acting as a bridge near the middle, producing two sounds. The end of the bow is held between the teeth, and the string is struck with a small stick.

Hottentot (*Gom-gom*). A bow with a single string. This string is cut near one end and the flattened barrel of a quill tied to join the two pieces. Sometimes the quill is replaced by a piece of a cocoanut shell. The quill or shell is held against the lips of the player, something like a comb covered with thin paper. The player sits down, grasping the bow near its middle with his right hand; at the same time one finger of his hand is placed in his ear, the other in his nostril, and with a stick 5 or 6 inches long in his left hand he strikes the bow-string in several places. The sound produced is soft and low. Five notes can be effected. Between the fundamental tone and its octave there are three intervals. This instrument is also called "Gorah" or "Goura" by the Bushman, and "Joumjoum" when played by the women.

Mashonaland, Africa (*Wedsa*). Similar to the bow of the chase or war. To it is tied a gourd resonator, which is held against the body while the string is struck with a stick.

Mozambique (*Bobre*). A bow with a single string and a gourd tied to the back of the bow as a resonator, struck with a drumstick, on the head of which is a rag enclosing some seeds, forming a rattle. The specimen in the National Museum (Cat. No. 94661) has a round stick for the bow 80 inches long; the gourd resonator has a diameter of 4¾ inches and a height of 4 inches. The gourd has an opening at its lower end, which is held against the naked body of the player. The sound produced is somewhat modified by varying the opening between the lower edge of the gourd and the player's body.

Lake regions, Africa (*Kinada*). Small bow with one string and a gourd resonator tied to it; held in the left hand and struck with a stick in the right. Sometimes the bow passed through the gourd.

Madagascar (*Zedzi lava*). Bow, a cylindrical stick, to which is tied two-thirds of a gourd for a resonator; string, a three-ply cord of vegetable fiber; bow held in left hand and the open part of the gourd pressed against the player's chest. In his right hand is held a small rattle of palm leaf; also a slender stalk of split cane, with which he strikes the string, its note blending with the sound of the rattle.

New Britain (*A-Pagola*). Has two strings, one of which is bent down almost to the bow and held by a loop of cord. It is tuned by moving this loop to or from the middle. The end of the bow is held by the mouth, which acts as a resonator. The strings are beaten by a stick in the right hand, the left stopping the strings. A woman's instrument.

New Guinea (*Pagola*). The bow, strung, is held partly by the mouth, the string being pressed by the thumb of the right hand and struck with a stick in the left. Played by women only.

Florida island, 9 S., 160 E. (*Kolove*). A small musical bow struck with a stick. One end of the bow is held by the teeth to reënforce the sound.

Pentecost island, 16 S., 128 E. (*Vuhudendung*). A small flat, thin bow of wood. The string passes from a hole near one end to a stud or spur formed on the other. It is held by the teeth and the string struck with a double stick.

Interior of Brazil (*Umcunga*). Bow of rattan, string stretched from one end to about two-thirds its length and tied. Beaten with a small stick, the bow being held against the throat or vocal cords.

Tule, California (*Mawahellis*). A tule reed with a longitudinal half section of the upper joint removed and a hole made in the lower end for a vertical tuning peg. String of gut. It is not known how it is played. (Cat. No. 19, 87 U. S. Nat. Museum, Section Music.)

Pueblo, New Mexico (*Thlin-thli-no-me*). A round stick with a rude tuning peg through one end. One string, supposed to be struck with a small stick. (Cat. No. 48089, U. S. Nat. Museum.)

After looking over the musical collection of the United States National Museum and such literature as has been collected by the Bureau of American Ethnology, I have come to the conclusion that stringed musical instruments were not known to any of the aborigines of the Western Hemisphere before Columbus. Those who have read my paper on "The Introduction of the Iron Age into America" will remember that attention is there called to the very early intrusion of African arts into the Latin-American areas. In one case we have a musical instrument imported by negro slaves given to the Indians with its native African name and abandoned by the negroes themselves.

BOOK REVIEWS

Die Göttergestalten der Mayahandschriften. Ein mythologisches Kulturbild aus dem alten Amerika. Von Dr Paul Schellhas. Dresden: Richard Bertling, 1897. 8°, 34 pp., 2 pl., 75 figs.

Eleven years ago Dr Schellhas, recognizing the convenience it would be to students of the Maya codices to have a provisional nomenclature of the figures of the gods in these writings, suggested the adoption of an algebraic method. He separated the figures represented in these codices into types and designated them by letters, *A*, *B*, *C*, *D*, etc. This method was still further elaborated in an article on the forms of the gods depicted in Maya codices, published in 1892. He has now brought the subject up to date in a neat pamphlet, which every one interested in Maya pictography should carefully study.

 Land of Sunshine. V. Nov 1896

SONGS OF THE NAVAJOS.

FROM THE MUSICIAN'S POINT OF VIEW.

BY JOHN COMFORT FILLMORE.



FROM the stand-point of the scientific student of folk-song, all these Navajo songs which I have had the opportunity to study are extremely interesting. This interest, too, is of several different kinds. The Navajos, like all other makers of folk-music, use their songs as a medium of poetic and emotional expression; and it is very interesting to note the quality of melody they employ for this purpose. One may note the range and kind of intervals, the kind of rhythm and metre and the quality of tone which these people find appropriate to the expression of certain ideas and feelings in song. A comparison of the Navajo songs, in these particulars, with the corresponding songs of other tribes and races would be a most interesting ethnological study; especially as the innermost life of all our aboriginal tribes is embodied in their music. So far as I know, all their prayers and expressions of religious feeling find outlet in song; so do all the deeper social emotions; and the historical records of the tribes, the traditions of noble deeds, the memories of good and bad fortunes received at the hands of the gods, all are recorded and handed down in the songs of the various societies.

In Dr. Matthews's paper (printed last month in these pages,) account is given of the poetic contents of some of the songs. Before proceeding to discuss any of them from the musician's point of view, I desire to add a word concerning three of the songs, the music of which I have transcribed from the records of Dr. Matthews's phonographic cylinders. I give the account from notes sent me by Dr. Matthews.

The two songs recorded on cylinder No. 38 are "songs of the War-gods sung in a ceremony where men, dressed to represent the wargods, enter the medicine lodge." Dr. Matthews translates the songs as follows, premising that "SLAYER-OF-THE-ALIEN-GODS" and "CHILD-OF-THE-WATERS" are the principal Navajo wargods.

1. Now SLAYER-OF-THE-ALIEN-GODS advances.
2. Above, among the peaks, he advances.
3. Now CHILD-OF-THE-WATERS advances.
4. Below, among the foot-hills he advances.

The one on cylinder No. 49 is called the Finishing Song. "It is the last song sung during the great nine-days' ceremony of the Night-chant. It is sung at daybreak, after a long night of song and vigil. To explain the meaning, even if I gave you the text and translation, would require a chapter, so I will not attempt it. The song refers to mysteries connected with the ceremony."

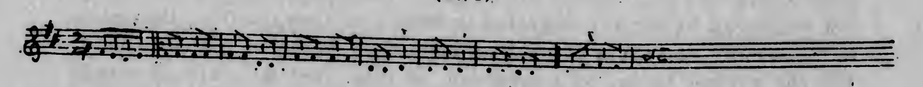
The song on cylinder 62 "is a song sung by a dozen male voices while the singers dance, out of doors, on the last night of the ceremony of the Night-chant. There are only two words in the song to which any

TRANSCRIBED BY J. C. FILLMORE.

CYLINDER No. 38. SONGS TO THE WAR-GOD.



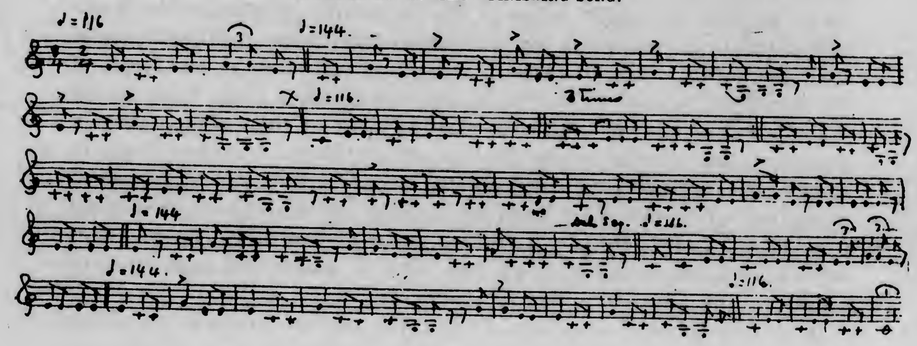
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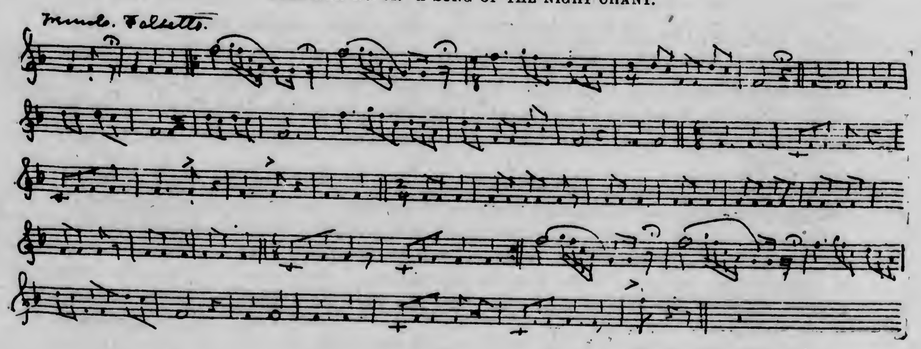
CYLINDER No, 41. THE BLUEBIRD SONG.



CYLINDER No. 49. THE "FINISHING SONG."



CYLINDER No. 62. A SONG OF THE NIGHT CHANT.



meaning is assigned, and these are archaic; one of them means 'The Corn grows up,' and the other 'The Rain descends.' These songs are sung loudly and may be heard a mile off on a still autumn night."

All the Navajo songs I have heard, either in Dr. Matthews's phonographic records or from the Indians themselves, have been sung with a quality of tone that suggests that they must be very primitive in character. Some of them are howls rather than songs, and the emphatic notes are sometimes grunts quite indefinite in pitch. Others, like that on cylinder No. 62, are sung in falsetto and with a peculiar tremolo impossible to describe and difficult to imitate. Evidently these people have not yet begun to pay any attention to beauty of tone quality; they sing in tones more like those of wild animals than those of human voices. But the curious thing, to a musician, is this: that *all this shouting, howling and whining proceeds along chord-lines.* I have elsewhere pointed out the vital significance of this fact.* It shows, I think, plainly enough, that *the line of least resistance for a voice making folk-melody spontaneously is the line of a major or minor chord.* I ought to premise, however, that what is true of the songs of these Navajos is equally true of the folk-music of all races, so far as I have yet studied them. My work in this field has included the songs of several of our own Indian tribes besides the Navajos; viz. Omahas, Poncas, Pawnees, Sioux, Otoes, Winnebagos, Zuñis, Iroquois, Coahuia, Pomo and Esquimaux, besides two remote tribes in the mountains of Mexico, the Tarahumar and Tepehuan tribes, whose songs were given me by the ethnologist Carl Lumholtz. Further, I made a very thorough study of the songs of the Kwakiutl Indians from Vancouver Island when they were at the World's Fair in Chicago and have studied many of their songs since in phonographic records taken by Dr. Franz Boas, who had them in charge. My studies have also included songs of the Australian cannibals given me by Mr. Carl Lumholtz, songs taken down at first hand from South Sea Islanders, Javanese, Chinese, Japanese, Arabs, Turks and Dahomeyans at the World's Fair, and of course the folk-music of all the European races, including the Russian.

In all folk-music, everywhere, I find unity of the principle on which it is constructed. Folk-melody, everywhere, the world over, is *harmonic* melody; it has a key-note or Tonic and tends to move along the line of the Tonic chord, adding afterwards the tones which belong to the chords most nearly related to the Tonic. These are no other than the tones which make up our major and minor diatonic scales. In some of these races the tendency appears to be strong to add to the Tonic chord only the second and sixth of the major scale, sometimes laying the

*See "A Study of Omaha Indian Music" by Alice C. Fletcher and John Comfort Fillmore, published by the Peabody Museum of American Archæology and Ethnology of Harvard University, 1893; "Primitive Scales and Rhythms," published in the Memoirs of the International Congress of Anthropology, Chicago, 1893; "A Woman's Song of the Kwakiutl Indians," in the Journal of American Folk-lore, Oct.—Dec., 1893; also a paper in the same magazine for April-June, 1895; and various papers in the magazine Music, published in Chicago by W. S. B. Matthews, besides one on "Some Tigua Songs," published in the LAND OF SUNSHINE for May, 1896.

principal stress on the first (Do) and sometimes on the sixth (La). In the former case the key is major and in the latter minor. The same tones are used for both keys and the question of key is simply a question of the location of the centre of gravity. These five-toned scales are not only exceedingly common as a basis for the old Scotch and Irish folk-songs, but almost equally so for peoples as widely separated as the Omaha Indians, the African Negroes and the Chinese.

The Navajo songs I have here transcribed are illustrations of melody so primitive as to bring us very near to the beginning of music-making. Number 1, on cylinder 38, is in C minor. C is plainly the key-note and the song is confined mainly to that tone and its minor third, E flat. G, the remaining component of the Tonic chord, does not appear at all, but B flat comes in at first so decidedly as to suggest E flat major as the Tonic chord. It also appears later as a bye-tone. The implied harmony of the song is plainly the chord of C minor as Tonic and its relative major, E flat. The second song on the same cylinder, after a preliminary flourish, settles down to the interval D—F sharp, suggesting D as the key-note, but not making it absolutely decisive.

The two songs on cylinder 41, a part of one of which I give here, embody a complete major Tonic chord and *nothing else.* Dr. Matthews thinks this is the Bluebird song referred to in his paper, (he had not the cylinder by him when he wrote). The song on cylinder 49 also contains a complete major chord and *nothing else.* The one on cylinder 62 is in F major. It embodies the Tonic chord F-A-C and adds the second (G) and the sixth (D) of the scale. That is to say it is built on precisely the same five-toned scale which characterizes most of the ancient Irish and Scotch folk-music and is found all over the world at a certain stage of musical development.

Such coincidences as these are not the result of accident but of law. There is unity of folk-music the world over, no matter how widely separated in blood, habitat and customs may be the peoples who make it, simply because there is unity in human nature as regards the structure of the ear and of the vocal chords, and also as regards the correlation of these with acoustic laws on the one hand and with physical laws on the other. It has taken us a good while to find this out, simply because competent musicians have not hitherto had their attention directed to the phenomena. Indeed, an examination of Richard Wallaschek's book entitled Primitive Music, an exhaustive summary of what was known on the subject up to the spring of 1893, when his book was published, will show that up to that time there was a great paucity of authentic material. Even now there are students (not musicians, however) who are working at the problem of folk-music on the assumption that every accidental aberration from the chord-line on the part of the untrained savage is made with deliberate intention and implies a new form of scale. This is, of course, quite as absurd as it would be to assume that a new scale is required every time our own singers sing out of tune. But I have dealt with this question minutely in the various publications heretofore referred to.

Pomona College, Claremont, Cal.

and is apt also to suffer mitigation in the course of subsequent study.

C. J. KEYSER
COLUMBIA UNIVERSITY

Hopi Songs. By BENJAMIN IVES GILMAN, Secretary of the Museum of Fine Arts, Boston, Mass. Hemenway Southwestern Expedition. A Journal of American Ethnology and Archæology. Fifth and Concluding Volume. Pp. xi + 235. Boston and New York, Houghton, Mifflin Company. 1908.

The text of the volume is divided into three sections: I., The Rote Song of the Hopi; II., The Phonographic Method; III., Notation, Diagrams and Comments. Seventeen Hopi songs are included in section III. A brief account of The Hemenway Southwest Expedition closes the volume.

The author opens his treatise by saying:

The study of Hopi, or Moqui, singing, to which this volume is devoted, completes an inquiry into Pueblo music begun in 1891 with a study of Zuni melodies. The records upon which both investigations have been based were obtained in Arizona by Dr. J. Walter Fewkes, now of the Bureau of Ethnology, Washington, at the time in charge of the Hemenway Southwestern Expedition, who first applied the phonograph to the preservation and study of aboriginal folk-lore.

Of his previous study the author writes (p. 11):

The major thesis of the "Zuni Melodies"—that Pueblo music is without scale—is strongly confirmed by this cumulative evidence. The diatonic form of the Hopi songs is (*a*) harmonic necessity or (*b*) apperceptive illusion. In large measure their adiatonic features are at once (*c*) intentional and (*d*) inexplicable by interpolation and transposition. The minor thesis of the "Zuni Melodies"—that "In this archaic stage of the art the scales are not formed but forming"—is rather weakened than corroborated by a closer study of Pueblo music. Its bent toward change inspires a doubt whether, unless by outward compulsion, it would ever submit to the trammels of a system. It appears an unhistoric rather than a prehistoric art.

Under the head Scales an Instrumental Product; the Voice Determining their General Form, the Ear, the Hand and the Eye their Varieties, the author skillfully proceeded to show that "Although the voice provides the raw material for scale building," the instruments have rendered service, so that

It would appear that while still disembodied music tends to remain adiatonic, though always of necessity diatonoid. Only when incarnate by instrumental constraint does it chose, because it must, the best of all possible yokes.

Other factors have influenced scale development so that

Scales may result with which the voice has had little to do, giving back to music, at the convenience and pleasure of ear and hand and eye, a semblance of the liberty of its vocal stage.

Under the head of Freedom, a characteristic of Pueblo music, the author writes:

Apart from the tendency to consonant intervals no metes and bounds to invention manifest themselves in these melodies, and they may apparently be altered by every performer.

In this connection a footnote calls attention to a fact presented at Berlin in 1888 before the International Congress of Americanists that

The anatomists of the Hemenway Southwestern Expedition found the hyoid bone of the ancient skeletons exhumed on the Rio Salado exceptionally elastic in structure. The position of this bone at the base of the tongue makes it an important factor both in speech and song.

This fact should not be forgotten when considering the data presented in this volume as of wide application. Nor can the statement that songs "may apparently be altered by every performer" be accepted as true of Indian songs in general. Accuracy in the rendition of a song, particularly of one that was a part of a religious ceremony, was insisted upon. In some of the tribes a mistake, or variation, in singing a song, constituted so grave a matter that it put a stop to the ceremony, until after a rite of contrition had been performed; that being finished the ceremony had to begin afresh. That there were slight variations in pitch and intonations was true, but they were such as occur among ordinary singers and did not affect the movement and flow of the melody, which the

The pistils of the lilies are in general alike.

singers were careful not to disturb, as the song in all religious rites was regarded as a message to the supernatural.

Section II. deals with The Phonographic Method. The author says of the phonograph: It "makes possible a hitherto unheard-of thing, the detailed study of an individual performance of music. It opens a field of investigation, that of the actual events of which music consists, which has hitherto been accessible to observation in only a very limited way—while a performance lasts, and in so far as it can afterward be recalled by memory." From the premise that "Music is an art of interval and measure primarily, and one of timbre secondarily" the author proceeded to a phonographic study of interval in Hopi singing. He says:

> With a series of tests not psychological but physical I endeavored both to find the principal limitations of the instrument by the trial of various conditions of inscription and reproduction, and to determine the degree of exactness of its best performance. The method consisted mainly in noting the amount of variation in the rapidity of pulsations of sound called beats produced between a phonographic reproduction of a note held continuously and another note known to be of constant pitch.

Then follows a lengthy account of his work upon these tests and the conclusion:

> As an apparatus for the reproduction of textures of interval the phonograph may fairly be called an instrument of precision.

Of the "method and symbolism of the notation" we read:

> Like the records of Zuni music these . . . are the result of an attempt to judge the tones delivered by the phonograph by means of the sense for difference of pitch alone, without aid from the sense of interval. My aim has been to make a separate estimate of the pitch of each individual note of each performance, through its comparison with one or more of the series of tones at intervals of a tempered semi-tone, or 100 cents, given in the notes of an ordinary harmonium. This comparison was made, as before, by silencing the phonograph the moment the note to be judged had been reached, and immediately thereafter sounding a harmonium note. . . .

For the expression of "the minute scale of fourteenths of a tone made the basis" of his records the author adopted modifications of the historical notation by which he says:

> There is thus afforded for each of the fourteenths of a tone assumed as the steps in the scale of these notations a gradation of position easily distinguishable from every other.

He further remarks:

> The attempt to follow the musical practise of non-European peoples with such minuteness must justify itself, either on the ground that accuracy of observation is a thing worthy to be aimed at for its own sake, or on the ground that in this branch of research such a degree of it has veritable value for purposes of theory.

Section III. is composed of the presentation of each of the seventeen Hopi songs; given first on the usual clef, next the phonographic record according to his plan of notation, then a chart showing the "Course of Tone," followed by more or less elaborate "Comments." In some of these latter the author shows a fine appreciation of "these wild flowers of fancy, the wanton yield of naïve delight in the vocal production of interval," as in connection with "Snake Song No. 4" where he says:

> The interest of the song lies in its stately rhythm, occasionally delicately varied; and in this deliberate ascent, as if from level to level of the singers native mesa, with a pause midway in each to rally loiterers.

The volume represents much careful work and is a valuable contribution to the study of the phonetics of some kinds of Indian singing. The quality of tone is not touched upon and unfortunately the songs under consideration do not present a wide range of rhythms so that that interesting aspect is not dwelt upon. All the records under examination are from single singers. The Indian solo singer is apt to waver more in pitch than when he sings with a group. A number of voices not only strengthens the tone but steadies the interval. Moreover, comparatively few Indian songs are intended to be sung by one voice only, so that such records as those presented in the volume can hardly be regarded as representative of Indian music. They do not picture the songs as they appeal to the Indians, nor does the dissection of tones, as here so ably given, assist our race to discern the beauty that lurks in a vast number of the songs of the American Indian.

Alice C. Fletcher.

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36	*30*	*24*	*18*	*12*	*6*	*3*
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Extremely Slow	Very Slow	Slow	Moderate	Fast	Very Fast	Extremely Fast
Solemn	Quiet	At ease	Natural	Animated	Agitated	Precipitous

SCIENCE NEWS--DEC. 1928

22. COMPARATIVE MORPHOLOGY OF THE GOURD RATTLES OF SOUTH AMERICAN INDIANS

SIMON GINSBURG

Rattles

The gourd rattles from South America in the collections of the Academy of Science in Leningrad show an uninterrupted series of stages of transformation of ordinary gourds into rattles. The final stage of the series has a wooden handle which is either tied or glued to the rattle. Notwithstanding multiplicity in details, there are essentially three types. Beginning with the ordinary gourds, a type of rattle may be distinguished with arrangements for filling the rattle. This leads to a type in which the handle is attached to the perforated gourd. The morphological study of musical instruments must be combined with a study of their function. The rattles are used accompanying dances shamans and as toys.

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OF THE MUSIC OF NORTH AMERICAN INDIANS we possess only an imperfect and scattering knowledge, for among the authors on the subject a small minority only could boast of any acquirements in theoretical music. Now a recent writer, Theodore Baker, has in 1880 examined personally the songs and tunes of several of our Indian tribes, and has brought to bear on these a fair knowledge of musical theory, obtaining thereby many curious results. From forty-two songs and tunes, obtained from representatives of at least twelve tribes, and appended to his publication: "Ueber die Musik der nordamerikanischen Wilden," Leipzig, 1882, 8vo, pp. 82, illustr., he feels justified to refute the common idea that Indian melodies cannot be expressed by our musical scales and notes (p. 22 *sq.*). A large majority of their tunes show a purely diatonic progress in their notes, and the gamuts or scales, in which they move, are comparatively few in number. The majority of the melodies examined seem to belong to the Lydian scale (c d e f g a h c′) and to the Hypophrygian (g a h c′ d′ e′ f′ g′),[1] but in very few of them will be found *all* the seven notes of the diatonic scale. Every melody has the quint or fifth with its key note; one-half of them have the major third or diatone, while the flat or minor third occurs in a few only; the fourth and the sixth frequently occur, but the seventh note is rather scarce. Although the Indian uses all the

[1] Equivalent to our c sharp and g sharp gamut-scale.

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seven notes of our musical scales, he avoids many of our melodial sequences; the majority of his tunes follow the *dur* or *sharp* scales and the two-eighth or two-fourth measure. The instruments accompanying Indian song are the flageolet, flute, panflute, whistle, and various kinds of tambourins, drums and kettledrums. See Baker, Theodor: Ueber die Musik der nordamerikanischen Wilden, Leipzig, Verlag von Breitkopf und Härtel (Haertel), 1882, 8vo, pp. 82, 2 plates, of which one is colored.—*Albert S. Gatschet.*

Am. Nat. Vol. 17, No 2, 226-227, Feb. 1883.

Papago Singing

Anthropology

SINGING FOR POWER—Ruth Murray Underhill—*Univ. of California Press,* 158 p., $2. Contains a large number of Papago Indian songs, some very beautiful, and describes the occasions on which the songs are sung and their purpose. No music is given.

Science News Letter, May 28, 1938

Lion's Tooth Called First Musical Instrument

WHAT is believed to be the oldest musical instrument in the world has been discovered on the slopes of the Pollau mountains in Czechoslovakia. It is a musical pipe made of a lion's tooth. It sounds a signal in the notes of D and G which can still be played perfectly after some 30,000 years.

Prof. Karel Absolon of the Brno University, discoverer of the pipe, claims that the very origin of musical instruments, and painting and sculpture as well, is traced to these mountains. His excavations, continued through a number of years, have brought to light many objects made by the mammoth hunters of Central Europe. The lion-tooth pipe is his latest find.

The artistic work of this Aurignacian culture is shown by such pieces as the head of a wild horse, admirably modeled. The stone horse's head is identified as copied from the little horse, *Equus ferus,* which was thickly covered with hair and roamed in Europe during the Ice Age. The species was re-discovered only in the eighteen eighties, by a Russian explorer in the Central Asiatic steppe lands. A reindeer head is another art work by the mammoth hunters.

Most striking of the art exhibits is the statue of a mammoth complete. The prehistoric sculptor captured the characteristic form of the shaggy giant, the back drawn upward, its plump and heavy legs, all familiar to science from reconstruction of real mammoth remains.

The ancient hunters made "combination tools," Prof. Absolon's collection shows. One three-fold implement is a blunt stiletto at one end, a notched trowel at the other, while from beneath it is a chisel. A saw with serrated teeth is another tool of this Old Stone Age.

Science News Letter, February 10,

SONGS, ECHO OF CENTURIES
INDIANS SING IN 'DEAD LANGUAGES'
WORDS UNKNOWN TO TRIBES

By Cora Ives

The central California Indians have many folk songs, 60 at least. They are all different in music and motif, have considerable melody and distinct rhyme and meter, which is easy to perceive, even if you do not understand the words.

In the olden days music went with all of the Indians' games, dances and ceremonials, and is still an inseparable part of them. There are love songs and lullabies, too, but not as many. Most of the songs "go with the gambling games" or are "dead songs" or "war dance." The gambling game of "little hands" claims by far the greatest number. The Indians sing perpetually while they play that game, and at certain points in the singing they bring their hands down on the table or the ground, and the opposition has to guess whose close hands conceal the little sticks. In the correct guessing is the gamble of the game, and in the songs and the rhythmical motion of the hands lies the charm. The Indians say that it is almost as good as dancing and that there is money in it besides.

The Indians rarely if ever sing their songs unless they are dancing or playing. Usually they sing ours when they just feel like singing. They are a little afraid to sing the death songs, as though they might bring bad luck, and very few of the Indians are familiar with more than one or two love songs or lullabies. Those songs seem to be much less popular than the others.

Tribes Understand

The Indian songs evidently ante-date their tribal divisions, for the central California and the Nevada Indians have the same songs. They can meet to play without any difficulty, because their games and the songs that go with them are common. It is almost the only resemblance between the tribes for their languages are not similar. The language of the songs does not resemble any of the modern languages. None of the Indians can understand it. For the past few years the Indians have been trying to write these songs, for they are afraid that with the passing of the games and of dancing the songs that are so dear to them will pass also. They are not hard songs to write, for the words are very distinct, as is the music and the rhyme of the verse; but even written they still bear no resemblance to any of the spoken languages.

Out of 15 or 20 songs that a crowd of Indians sang one night, there was only one word that had any meaning to them. It was "driftwood," although they did not call it that. They said it meant "trees that were coming down with the river." They did not know another word of any of the songs, not even enough to know what the songs were about. They only said, "We use this song for this game, and this one for that dance, and this is a love song my cousin sings all the time"; but they did not know what it was about. "No, we can't understand one word, none of us can."

Echo of Centuries

These songs seem to have been taught by word of mouth. One generation was taught by the other, and whatever else they lost in the nomadic life and the breaking and the scattering of the tribes, the power to sing seemed to stay with the Indians and the ability of handing down unchanged their various songs. There is something very remarkable about that. Usually a language has to be a written language to stay free of change, and, in addition, a dead language. There is no question but that these songs are in a dead language. It is a language that no Indian speaks or knows anything about today; but it is not and never was a written language.

That makes it all the stranger that the songs, the legacy of so many tribes, were the only things about the tribal customs that did not change. It is the one and only bond of union that exists between them. They are quaint, joyful, cheery little tunes full of music, full of rhyme. Somehow we cannot associate them with the Indians that we know, they seem to speak in a language that is not theirs.
died down a war dance was staged, followed by the Tubil and Ioohue dances, used by the Indians only on the most solemn and significant occasions.

The burning was staged on Charley's place, in Jackson valley, five miles from here. A large throng of curious white people watched the pageant.

Chief William Fuller of the Tuolumne reservation presided as master of ceremonies. Alfred C. Gillis, a Wintoone Indian from Baird, on McCloud River, was the orator of the occasion. Frederick G. Collette, executive officer of the Indian Board of Co-operation, also addressed the gathering.—Stockton (Cal.) Record, April 21, 1924.

Journ. Wash^n Acad. Sci. Vol. 20, No. 21. Dec. 19, 1930.

In Florida there exist about 40 species of mammals; in California approximately 190. I find only eight species common to the two states.

If the fossils of Fossil Lake and of La Brea are not regarded as contemporaneous with those of the Plains and of Florida, geologists of some æons hence who may have in hand fossils of the present day mammals of the eastern third of our country and of the western third would, on the same grounds, be justified in referring them to quite different geological stages or epochs.

ETHNOLOGY.—*The music of the American Indians at public gatherings* (Abstract).[1] FRANCES DENSMORE, Bureau of American Ethnology.

Music was an important factor in public gatherings of the Indians and they derived much pleasure from it, yet there were no concerts and the European custom of ballad singing was unknown. The American Indian never sang for the approval of others, neither did he sing in order to be paid for his performance. His pleasure in music was not connected with technic but with the melodies, their words, and certain associations of the songs. In the old days every Indian song was an inspiration, not a creation of man according to rule and precept.[2]

After describing the Indian custom of "receiving songs in dreams" the writer considered her subject under four divisions: poetry, drama, dancing and games. The accompanying instruments were various forms of drums and rattles producing rhythm but not melody.

The poetry of the Indians is contained in the words of songs and rituals. There is no attempt to interpret these words by the manner of rendering the songs. Many song-cycles of southwestern tribes relate the journeys of mythical personages, and the people dance during a portion of these songs. The beauties of nature form the subject of many songs, the words being few but highly poetic.

Primitive drama is closely associated with music. There is rich

[1] Received Oct. 9, 1930. The paper of which this is an abstract was read by Miss Elizabeth Burchenal, September 1, 1930, at the International Congress of Popular Arts, held at Antwerp. It was the only paper from the United States on the program. The other papers were from England, Spain, Holland, Belgium, Germany, France, and Italy.

[2] With reference to my paper on the music of the American Indian (this JOURNAL **18**: 395–408, 1928), Prof. CONSTANS MALTEZOS, a member of the Academy of Athens and a student of ancient oriental and Peruvian music, who had thought that there might be an intelligent system underlying the music of the American Indians, writes me as follows: "Je trouve que vous avez raison: vos Indiens ne pouvent avoir eu une idée de intervalle du ton. Cette musique n'a pas passé par le mains de théoreticiens."

Dec. 19, 1930

pageantry, as well as music, in the ceremonies to bring rain. The Sun Dance of the Plains tribes had its ceremonial songs, and the warrior dramatized his victory over the enemy. Among the Sioux, the man who had received a vision acted it out, that all might know he had the elk or the bear as his spiritual helper, and he sang the song given in his vision. The history of Indian tribes is replete with drama in ritual and ceremony.

Dancing differs in style among the various tribes, some maintaining a dignified manner while others have contests in acrobatic dancing with many contortions. There are dances of individual expression, dances imitating birds and animals, and dances in which the people stand still, flexing the knees, but in a majority of Indian dances the people move in a circle around a large drum.

Games of pure skill and calculation, like chess, are unknown among the American Indians, their games being contests of dexterity or games of chance. Success in games was formerly attributed to supernatural aid, and songs were sung to ensure that aid.

In closing, the writer described various customs connected with Indian music and noted the absence of self-aggrandisment on the part of Indian musicians. It was the old belief that songs were given by friendly spirits, and their use was chiefly associated with securing help and benefit to human beings.

PROCEEDINGS OF THE ACADEMY AND AFFILIATED SOCIETIES

ENTOMOLOGICAL SOCIETY

421ST MEETING

The 421st regular meeting of the Entomological Society of Washington was held at 8 p.m., Thursday, June 5, 1930, by special invitation at the University of Maryland, beginning with an informal picnic and basket dinner from 6 to 8 p.m. on the campus and continuing with the formal session at 8 p.m. in the University Auditorium at College Park, Maryland. J. E. GRAF, president, presided. H. L. PARKER, European Parasite Laboratory, Hyères, Var, France; NEWELL E. GOOD, Bureau of Entomology, Washington, D. C.; and JAMES ZETEK, Barro Colorado Island Biological Laboratory, Canal Zone, were elected to membership in the society.

A brief informal address was given by H. J. PATTERSON, Director of Maryland Agricultural Experiment Station, in which he greeted the society and extended welcome for all to the University. He then read a note from R. A. PEARSON, the President of the University, expressing regret at inability to be present and writing in highly appreciative terms of Doctor Howard and their personal associations. Doctor Patterson expressed hope that all the scientific

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MEMBERS OF INDIAN BOARD VISI HARRIS

HARRIS, May 5.—Alfred C. Gillis Weaver of the California Indian B operation, were here Thursday on making up the final membership Indians.

The members of the First were treated to a most instr talk by each of the visito the business of the meeti Indian songs, includin "Doctor Song." In r of the local organi the visitors. He s the Grass Game dance.

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It Mr th

INDIAN GIRL SEIZES OPPORTUNITY WITH RECORD SPEED

Miss Daisy Girado of Loraine is evidently acquainted with the ancient maxim that "opportunity knocks but once." In fact, she didn't wait for the knock; she went to meet it.

Miss Girado is the seventeen-year-old daughter of Mrs. Daisy Girado of Loraine. She has four small brothers and sisters and is a very busy member of her family but she still has time for ambition.

Two years ago, Miss Daisy was forced by unfortunate circumstances to leave school. During the time of her enforced vacation, she had been busy with a correspondence course on the accordeon with the result that she played very nicely on that instrument, but for these two years she had cherished the hope of continuing her school work some day, so when Mr. F. G. Collett, Executive Representative of the Indian Board of Co-operation, on a short trip to Loraine, saw her and suggested that she return to school, his suggestion met with enthusiastic response.

Crowded conditions in the local schools made enrollment there impossible. Besides, no spirited girl likes to enter school two years behind a class she might easily have been a member of had conditions been different. So Mr. Collett suggested that she might like to go to Bakersfield or San Francisco to complete her work.

It takes courage for a girl who has never been away from home to take such a decided step and Mr. Collett expected that Daisy would want a little time to think it over. He was, consequently, not a little surprised when in ten minutes the young lady appeared with her suitcase packed, ready to leave at once.

Mr. Collett, feeling that a spirit of this sort ...uld be encouraged, re-arranged his own affairs ...at he might make the forty mile trip to ...field at once and before the close of that ...y was established in a comfortable home to ...om and board, and enrolled as a student in ...eld schools.

...rts show that Daisy is making the ... desired opportunity. She is show- ...rogress in her work. In her class ...igned and made a hat so attrac- ... exhibition in the City Hall ...able comment from teachers

PUEBLO LAND LEGISLATION

A Call to Battle—Bulletin No. 5, The American Indian Defense Association, Inc., The General Federation of Women's Clubs.

(The following appeal was received by the Indian Board of Co-operation. It is worthy of favorable consideration of all persons interested in Indian betterment.—Editor)

The Publo Indian land situation in Congress has been complicated by the introduction of a new bill by Senator Bursum (Senate Bill No. 2932). This bill the Senate committee proposes to report favorably.

This bill provides for adjustment of titles in substantially the manner agreed on by all parties at the February hearings, **with one crucial exception.**

It does not provide for any award of compensation to the Pueblos where white settlers are permitted to stay upon and hold lands inside the Pueblo grants. It provides only that a commission shall find the value of the land lost to the Indians, leaving it to the Secretary of the Interior to report to later Congresses, with recommendations, and leaving it to later Congresses to do what they please in the matter—as to compensation of Indians.

But machinery is carefully arranged so that the settler shall get clear title to land once Indian, foreclosing forever any Indian claim.

In other words, an adjustment **for the old settlers** is provided but none for the Pueblos. They, if they wish to assert their claims, must bring lawsuits against literally thousands of defendants, at an enormous expense (which they cannot afford), disturbing the peace of the community and making trouble all round. If they do not do this, their rights are gone and they must take whatever Congress arbitrarily chooses to give them. And there are many Indian claims for compensation which the government has not adjusted for years and years, may never adjust.

With a proper compensation provision the proposed bill (S. 2932) would be a relatively fair solution. Without such a provision it becomes unjust.

Write your Congressman and Senators at once to ask the Senate Committee on Public Lands to put in a provision providing for a binding award of compensation for the Pueblos into S. 2932, instead of the present toothless provision. If such a provision is not inserted, the bill should be defeated.

By CASH ASHER, Associate Executive.

Cut Off Here

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	ADDRESS	AMOUNT
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Eastern Woodlands, the Plains, and the Arctic are hardly represented at all, and there are practically no data at hand concerning them. Popular guides have been prepared for the two western archeological areas, and work is progressing upon similar guides for the others. A series of lantern slides illustrating the archeology of Ontario has been made; general and topical labels for the collection are in the hands of the printer; duplicates of these will probably be furnished to the other museums throughout Canada, which with duplicate specimens, casts, and photographs, when supplied to these museums, will make the archeological work truly national.

An archeological survey of the Dominion is being organized, a reconnaissance has been made of some of the village sites in Ontario, and a survey of Brantford township has been completed by Mr W. J. Wintemberg. A scheme for systematizing and digesting the scattered and incomplete archeological data at hand and to be received in the future has been inaugurated. The coöperation of railroad officials, the North West mounted police, Indian agents, and geological explorers has been secured.

It is proposed to explore the less well known parts of Canada beginning with intensive exploration at one site in each of the great cultural areas, in order that the results in the way of collections and monographs may be used as standards to which to refer for identification the results of future exploration obtained in bordering areas where we may expect to find mixed or superimposed cultural material.

It is planned in the near future to make a reconnaissance of the Plains from which there is practically no material today available, to continue scientific exploration into the northern interior of British Columbia, using the Grand Trunk Pacific as a base, and to do an intensive piece of excavation along the St Lawrence. Next the shell-heaps of the Atlantic coast may be examined.

The Analysis of Chippewa Music: Frances Densmore

The points discussed and the results arrived at in Miss Densmore's study are here summarized: Environment of Chippewa Indians,—possible influence of natural surroundings upon musical

expression,—difference between expression by means of tone and expression by means of musical intervals,—intonation of Chippewa singers more correct on large than on small intervals,—various classes of the 340 songs under analysis, two forms of analysis, melodic and rhythmic,—difference between tonality and key,—large proportion of Chippewa songs are major in tonality, but large proportion of intervals are minor,—average interval in 340 songs determined by reducing the 8286 intervals to terms of a semitone, the result showing the average interval to contain 3.1 semitones, or one-tenth of a semitone more than a minor third,—size of interval largest in songs of the pipe dance and moccasin game, and smallest in songs connected with gifts,—interval-formation noted most frequently in songs recorded at most primitive settlement,—interval of the fourth shown to characterize 21 songs concerning motion and 15 songs concerning animals,—consideration of the five-toned scales,—permanence of the fifth,—feeling for overtones of a fundamental indicated by structure of melody,—*interval* as melodic nucleus and *rhythmic unit* as rhythmic nucleus of Chippewa songs,—examples of development of each,—origin of songs in dreams,—analysis of dream state and influences acting upon it,—structure of songs shown to be harmonic, purely melodic, and melodic with harmonic framework,—average speed of drum in 340 songs compared with average speed of voice,—ability of the Indian to maintain two rhythms at the same time,—key of Chippewa songs compared with key of sounds produced by insects according to Dr Gardner,—why do Chippewa sing?—characteristics of songs of love and grief,—detailed analysis of moccasin game songs with relation to the nature of the game and the mental state of the players,—a majority of Chippewa songs shown to be connected with an unsatisfied state of mind.

The papers read of which the Secretary was unable to obtain abstracts were:

The Anthropology of the Pueblos: A. Hrdlička. (To appear as a bulletin of the Bureau of American Ethnology.)

Notes on the Words and Music of the "White Captive" Ballad: Charles Peabody.

considerably lower record, more than a third lower, belonged to another institution.

It seems only fair to Bowdoin College, and especially to its professor of biology, to publish this correction of an unfortunate oversight.

W. LECONTE STEVENS

LEXINGTON, VA.,
January 31, 1914

SCIENTIFIC BOOKS

Chippewa Music. II. By FRANCES DENSMORE. Smithsonian Institution. Bureau of American Ethnology. Bulletin 53. 1913. Pp. 314. 51 illustrations. 180 songs. 14 tables giving "melodic analysis of 340 songs." 7 tables of "rhythmic analysis" and a table giving "comparison of metric unit of voice and drum."

Bulletin 53 together with bulletin 47 (1910) are devoted to Miss Densmore's study of Chippewa music begun in 1907 and brought to a close in the present volume. In this bulletin the author presents the results of six years of labor, gathering songs from the Chippewa in their native environment and making careful studies of the songs themselves. By these means she has sought to answer three questions: What do the Chippewas sing? How do they sing? Why do they sing? The answers to the first two are presented in a clear, painstaking manner and in such form as to make them conveniently serviceable for comparative study. The third question is concerned with the psychological aspects of Indian song and consequently its answer could not easily be formulated in the same manner as those relating to the other two questions, nevertheless the author has recorded her observations on this point among the Chippewa. Truthfulness and earnestness of purpose characterize this book as well as an appreciation of the people from whom the material was secured. The work has a special value to the student of musical development and presents points of interest to the ethnologist. The Bureau of American Ethnology is to be congratulated upon its entrance into an important field and particularly upon its selection of so able and scholarly an investigator as Miss Densmore to conduct this difficult line of research.

An ample index adds to the usefulness and pleasure of the book. ALICE C. FLETCHER

Fosseis Devonianos Do Paraná. Pelo DR. JOHN M. CLARKE. Monographias do Servico Geologico E Mineralogico do Brasil. Vol. I., Rio de Janeiro. 1913. Pp. xx + 353; pl. I.–XXVII.

A monograph upon the Devonian of the state of Paraná, Brazil, which has been published recently by the Geological Survey of that country, constitutes a notable contribution to our knowledge of the geology of South America. The author of the work is Dr. John M. Clarke, the accomplished state geologist of New York. Long an investigator of the Devonian of that state, he has recently issued a number of monographs upon strata of the same age in both North and South America, including works upon the Lower Devonian of the Gaspé region, Canada, and upon the Devonian of the State of Pará, Brazil. To these he has now added this important monograph upon the Devonian of Paraná.

The volume consists of two parts. The first part comprises a discussion of the character and significance of the Devonian faunas of the region studied, while the second is devoted to a description of the species, with critical comments upon their relations to those of other areas.

The Devonian of America presents two broadly conceived types: a northern or boreal, confined chiefly to North America and the region north of the Amazon, and a southern or austral type. Dr. Clarke shows that the Devonian sediments found in South America, from central Brazil southward, contain an austral fauna. The latter, which differs from the boreal fauna in many respects, is a unit throughout its range, having definite and recognizable characteristics wherever found.

While the work before us is entitled a discussion of the Devonian Fossils of Paraná it is in reality a monograph upon the austral Devonian of the whole of South America. The author gives a critical discussion of the

Forest and Stream - 202 - Feb 15, 1913.

A FULL-BLOODED Chippewa Indian named Carlisle Kawbawgam, a graduate of the Government Indian School at Carlisle, Pa., has made a sensation in Berlin and Vienna, not as an athlete like Thorpe, but as a tenor singer. He is hailed by the critics as having a voice of the first order, and is called by them the "Red Caruso." He is now to study for grand opera in Berlin.

Am. Anthropologist, Vol. 1, No. 3, July 1899

word *poquosin*, and confidently asserts that "there appears to be absolutely no question as to its identity" with the latter, it may not be out of place to explain the meaning of the appellation of the city of the alleged "safe harbor." Having resided in Poughkeepsie many years, I am perfectly familiar with its topography and with the exact locality to which the name was originally applied. This was a rocky cove or basin worn away at the foot of the fall near the river just north of the present railroad station. On May 5, 1683, Massany, a Highland (west side of the Hudson) Indian, gave as a present to one Jan Smeedes, a farm and also "a fall on the shore to set a mill upon." Smeedes erected his mill upon the side of the pool or basin near the foot of the fall whence he obtained his water power. In the deed of gift, the Dutch scribe wrote the name of the mill-site *Pooghkepesingh* (for *Apoeghkipising*), a word which, in German orthography, would have been *Apuchkipisink*. The word means "at the rock pool," or "at the rock basin of water," and accurately described the locality to which the name was applied by its Indian owner.

The name of the place under consideration was distorted by the Dutch and their descendants into so many remarkable and unintelligible forms as amply to justify the remark once made by the late Dr Trumbull that "nothing disguises an Indian word so effectually as a Dutch pen."

W. R. GERARD.

An Inverted Double Reed—In the National Museum there are several wind instruments of music of the class here called "inverted double reed" which, with one exception, are in use only among the Coast tribes of British Columbia, and I do not find that any writer on musical instruments has called attention to them. To make the construction plain, let us divide reed instruments into three classes: (1), the ribbon reed, fastened at both ends and vibrating at the middle, as when one blows on a blade of grass held between the thumbs; (2), the single reed, fastened at one end and swinging free in its slot or beating against the edges of the instrument; and (3), the double reed, having two vibrating bodies instead of one. In the third class the breath is forced between the reeds. In the ordinary double reed, the free ends are toward the player's mouth, and they do not quite touch each other. The pressure of the breath brings the vibrating ends together, and the sound is produced by waves in the space beyond. But, in the British Columbia specimens, which Professor Mason has named the "inverted double reed," the free ends are away from the mouth of the player, are close together when at rest, and are forced apart by the breath of the player. Number 89060 is from the Bella Bella (Salishan) Indians. It

is a bit of cedar shaped like an elongated Indian club flattened at the thick end. The wood has been split and the large part or outer ends excavated to form thin, spoon-shape sections; the smaller or inner ends have only little channels cut in them for an air passage; the two halves are then lashed together with split spruce root at the inner end and at the point where the widening out begins; the outer ends are left free. When the breath is forced in at the mouth-piece it causes the free ends both to open and close and to produce a harsh sound. There are in the Museum examples of this class also from the Skiddegate Indians of Queen Charlotte islands.

The Massets of the same locality improve on this in an instrument with longer chamber and thinner walls, and the two halves are lashed in three places instead of two, namely, at the ends and just above the chamber or enlarged cavity. The action, therefore, is more like that of a "double ribbon reed." By holding the tube between the fingers at different points between the lashings, distinct tones can be produced.

The only other specimen of this variety of reed instrument in the National Museum is from Fez and is called *lira* (number 95762). It is a short joint of cane with mouth-piece at the open end. The jointed end is split and the parts set in vibration by the breath produce a reedy musical sound.

All of the North Pacific specimens are excavated by splitting and hollowing a bit of soft wood, Indian fashion, after the manner of the flageolets of the plains tribes.

I shall be grateful for any reference to a wider distribution of the "inverted double reed."

E. H. HAWLEY.

U. S. National Museum.

Cabot on the American Natives, 1497–1508—John Cabot, the English discoverer of America, sailed from Bristol, England, in May, 1497, in command of a little vessel carrying eighteen men. Steering westward, he came to land on June 24, somewhere on the coast of North America between Halifax and the straits of Belle Isle, most probably at or about Cape Breton island. Six weeks later he had returned to England, where his reports, confirmed by the stories of his shipmates, created much excitement. One of those who listened to the account of his adventures was Lorenzo Pasqualigo, a Venetian fellow citizen of the Cabots. Pasqualigo was in the habit of writing long newsletters to his brothers in Italy, and one of these, which has fortunately been preserved to our time, is dated August 23, 1497, less than a fortnight after Cabot's return to London. In it Pasqualigo gives an

Music : Sheet music on burial service recorded by Taylor, George H. 1904

C. Hart Merriam
Papers
BANC MSS
80/18 c

ctn 21

Indian Burial Service.

Andante. M.M. ♩.= 54

now-nik mah now-nik mah now nik mah Ko too mut-tah

now nik mah now nik mah Ko too mut tah now nik mah

now nik mah Ko too mut hooe

now nik mah now nik mah now nik mah Ko too mut tah.

now nik mah now nik mah Ko too mut tah now nik mah

now nik mah Ko too mut hooe (Repeat ad. lib.)

Sung by Mrs. J. N. Rosemyre

Transcribed and harmonized by Prof. Geo. H. Tavernier

1926 Truxtun Ave

Bakersfield, Cal.

E. Hart-Merriam

Recd. Aug. 4. 1904

For My Friend Dr C. Hart Merriam.

I "Vè vō è naht." (at the burial.)

[1]

allegretto. m.m. ♩=100.

Ri-mah! Ri-mah! ah soon-poro, Roo-no ka-ro.

Ri-mah! Ri-mah! ah soon-po-ro, Roo-no ka-ro

Ri-mah! Ri-mah! ah soon-po-ro, Roo-no ka-ro.

Ri-mah! Ri-mah! ah soon-po-ro, Roo-no ka-ro,



This song is sung at the burial while the relatives are gathered round the body, and is not used at their "Fiesta" or memorial Service which is held at a later date.

To those who criticize me for harmonizing an Indian melody, I (only) can say that if we take not compelled to play the accompaniment, but those who wish to, may.

Fred. H. Taylor.

[2]

Ri-rah! Ri-rah! ah soon po-ro Roae-no ska-ro,

Ri-rah! Ri-rah! ah soon po-ro Roae-no ska-ro,

Ri-rah! Ri-rah! ah soon po-ro Roae-no ska-ro,

rit

Ri-rah! Ri-rah! ah-soon po-ro

rit.

Fine

Fine

(over)

nū-rē! nū-rē! ah soon-po-ro,

so-aht-po, so-aht nah-ne-vo,

rit.

yi-vo yi-vo kah soon-po-ro, boo-no ka-ro,

Ri-nah! Ri-nah! ah soon-po-ro, boo-no ka-ro.

"Ī-vē-mah."

A San Gabriel Indian Song of

The "Ko-tu-mat Fiesta"

To my Very Good Friend

Dr. C. Hart Merriam

Chief Biological Survey U.S.

Phonographed and transcribed by

Fred. H. Taylor.

Bakersfield, California

Recd. August 4, 1904. - C. Hart Merriam

Allegretto. m.m. ♩=100.

Iō-vē-mah tō-vē-mah pan-nah hah-rē

Tō-vē-mah tō-vē-mah pan nah hah rē

Tō vē mah to vē mah pan nah hah re

Tō vē mah to vē mah pan nah hah re

Tō-vēt-kē pan-nah hah-rē

Tō-vēt-kē pan-nah hah-rē

To vē mah to vē mah pan nah hah re

To vē mah To vē mah pan nah hah re

Tō-vēt-kē pan-nah hah-rē

Iō-vēt-kē pan-nah hah-re

To-vē-mah to-vē-mah pan-nah hah-re

To vē mah to vē mah pan nah hah re

Iō-vēt-kē paw-nah hah-rē.

Iō vēt kē paw-nah hah-rē

To-vē-mah to-vē-mah paw-nah hah-re

To vē mah to vē mah paw nah hah re

To vē mah to vē mah paw nah hah re

To vē mah to vē mah paw nah hah re

Tō-vē-mah tō-vē-mah paw-nah hah-rē

Tō vēt kē paw nah hah re

Iō vēt kē paw-nah hah-rē

Mythology: General Features

Iolcus)

C. Hart Merriam
Papers
BANC MSS
80/18 c

THE MUSKRAT IN THE CREATION MYTH OF THE LENAPE

According to M. R. Harrington, the creation myth of the Lenape or Delaware Indians recites that "Some time after Gīcēlamŭ kaong had created the world it became flooded with water, and it seemed to be a difficult matter to find earth with which to commence a new one. The Great Spirit (some Mínsī say Nä' napûsh, an agent delegated by him) began to send down the various water animals which still survived to try to bring earth up from the bottom, but one by one they failed, and floated up to the surface dead. At last the muskrat was sent, and he succeeded in bringing up a little dirt in his paws. This was placed on the back of a turtle, which, with the mud upon it, immediately began to increase in size, until the 'great island upon which we live' was formed, round and flat, floating upon the waters."

Am. Anthropologist, Vol. 15, pp. 232-233, 1913.

M Y T H S

Non- Californian.

ESKIMOS, of Cumberland Sound & Davis Strait:

F.Boas: 6th Ann. Rept.Bur.Eth. for 1884-85, 1888.

Sedna & the Fulmar....pp.583--587.

Origin of walrus & reindeer .... pp.587--588.

Origin of sun & moon ..... pp.597--598.

Flight to the moon ..... pp.598-599.

Kadlu the thunderer..... p.600.

Tales & traditions.... pp.615-640, figs.537-542.

Bear Myths ... 638-639

M Y T H S

KIOWA:

<u>J. Mooney</u>: 17th Ann.Rept.Bur.Eth.for 1895-96:

pp.153, 238, 349, 1898.

IROQUOIS MYTHS:

E.A.Smith: Rept.Bur.Eth. for 1880-81: 47-116, illus. 1883.

~~(Echo)..... p.50.~~

~~(Medical Practice)..... pp.10-11, 15, 16.~~

M Y T H S

OJIBWA OF MINNESOTA (Charts, with translations, showing traditions connected with the Midewin).

G.Mallery: 10th Ann.Rept.Bur.Eth.for 1888-89: pp.252-256, 1893.

OSAGE of Indian Territory (Pictographic chart of Osage tradition as to descent of Tsi u; with translation).-- Ibid: pp.251-252.

M Y T H S

SIA INDIANS, NEW MEXICO

Mrs.M.C.Stevenson: 11th Ann.Rept Bur.Eth.for
1889-90, 1894.

Sia Cosmogony pp.26-69

Cult Societies(origin). pp.69-73

Animal myths (coyote, hares, lynx, cougar, &c.
pp.146-157

M Y T H S

NENENOT ("NASKOPIE") INDIANS OF UNGAVA DISTRICT,

HUDSON BAY TERRITORY;

L.M.Turner: 11th Ann.Rept.Bur.Eth.for 1889-90:

pp.327-350, 1894.

Folklore -- including stories of the Wolverene, Deer,

Squirrel, Wolf, Otter, Bear, Rabbit,

Muskrat, Marten, Beaver, Hare.

ESKIMO, BERING STRAIT

E.W.Nelson: 18th Ann.Rept.Bur.Eth.for 1896-97,

Part 1: pp.421-518, 1899 [publ.1901].

M Y T H S

ESKIMO OF UNGAVA DISTRICT, HUDSON BAY TERRITORY

L.M.Turner: 11th Ann.Rept.Bur.Eth.for 1889-90, 1894.

Beliefs as to future state, religion, &c.. .pp.192-201.

Story-telling and folk lore pp.260-267

(including the hare's [redacted], wolf's origin,
the fox wife, &c)

M Y T H S

SIOUAN :

J.O.Dorsey. A study of Siouan Cults.-- 11th Ann.
Rept.Bur.Eth.for 1889-90: pp.351-544, illus.
1894.

Including Bear, Buffalo, Deer, Rabbit, Wolf, Gopher, Elk, Wildcat: Beliefs, Taboos, Fetiches, Ceremonies, &c regarding each (Consult index).

M Y T H S

TUSAYAN, Pueblo Regions of Arizona & New Mexico
(Traditional history of Tusayan).

Mindeleff (after material collected by A.M.Stephen):

8th Ann.Rept.Bur.Eth. for 1886-87:16-41, 1891

M Y T H S

TUSAYAN, Arizona. (Tradition of origin and migration of Tusayan Indians as throwing light on the probable origin and affinities of the ancient pueblo builders of Verde Valley).--

C.Mindeleff (quoting A.M.Stephen): 13th Ann.Rept. Bur.Eth.for 1891-92: pp.188-189, 1896.

M Y T H S

ZUÑI (Outlines of Zuni Creation Myths).---

F.H.Cushing: 13th Ann.Rept.Bur.Eth.for 1891-92:

pp.321-447, 1896.

Including the origin of the Bear and Badger Clans.

M Y T H S

MENOMINI INDIANS: (Traditional history of Menomini genesis:Story of Mänäbŭsh in various versions; folktales, &c.)

W.J.Hoffman: 14th Ann.Rept.Bur.Eth.for 1892-93:

pp.87-- 239. 1896.

M Y T H S

CHEROKEE, North Carolina (Myth on the origin of disease and medicine)

J.Mooney: 7th Ann.Rept.Bur.Eth. for 1885-86:

pp.319--322, 1891.

Origin of Bear, ibid 310-311.

M Y T H S

CHEROKEE:

James Mooney, Myths of the Cherokee.--- 19th Ann. Rept.Bur.Eth.for 1897-98; Part 1, pp.3-505, illus. 1900 [publ,1903].

M Y T H S

NAVAJO (Origin of Dsilyídje Qaçàl -- Mountain Chant)

Washington Matthews: [5th Ann.] Rept.Bur.Eth. for 1883-84: 387--417, fig.50, 1887.

M Y T H S

NAVAJO (Myths about house-building)--

C.Mindeleff: 17th Ann.Rept.Bur.Eth.for 1895-96:

pp.488-9, 501-2, 1898.

MYTHS

J.Mooney: 14th Ann.Rept.Bur.Eth. for 1892-93, Part 2:

1896.

Hopi myth--Regeneration of.....p.811

Cosmology of Columbia tribes.....pp.720-22

" " Arapaho.....pp.959, 983, 976

" " Cherokee.....p.971

" " Caddo p.1093

" " Paiute.....p.1050

[redacted]

M Y T H S

OJIBWA, of Minnesota(Traditions of their origin & migrations)

W.J.Hoffman: 7th Ann.Rept.Bur.Eth. for 1885-86: 165--187, illus. charts, 1891.

M Y T H S

PICTOGRAPHS representing myths & mythic animals.

G.Mallery: 10th Ann.Rept.Bur.Eth.for 1888-89:
566-7,
pp.468--500, illus. 1893.

Nova Scotia along Kejimkoojik Lake;
Abnaki myths of Glooscap; & of Atosis; of the
Weasel girls; Kaloo; Kiwach; Sable and
Black Cat
Ojibwa shaman symbols.
West Virginia on Campbell's Run.
Arizona, in Canyon Segy.
Innuit drawing, Port Clarence, Alaska.
Haidi myths:Wind spirit; Skana (the demon Orca);
Bear-Mother.
Kwakiut of Alert Bay:Thunderbird;
Haidi drawing of Wasko & of Raven.
Dakota myth of the god that kills animals.
Menomoni of Lake Superior: White Bear of copper
mines.
Ojibwa mythic wildcats.
Winnebago magic animal.
Thunderbirds (Dakota, Haida, Twana, Ojibwa,
Moki)
Ancient Mexican mythic animal.
Ancient Peruvian " "
Australian mythic personages.
Ojibwa migration myth

ICELANDIC BEAST AND BIRD LORE by V. Stefansson.

Jour. Am. Folk-Lore XIX, No. 75, Oct.-Dec. pp. 300-308, 1906.

MYTHS OF NEZ PERCE INDIANS by Herbert J. Spinden.

Jour. Am. Folk-Lore XXI, No. 80, Jan.-March, pp. 13-23; Nos. 81-82, April-Sept. pp. 149-158, 1908.

TRADITIONS OF THE COOS INDIANS OF OREGON

Collected by H. H. St.Clair, 2d; edited by Leo J. Frachtenberg.

Jour. Am. Folk-Lore XXII, No.83,Jan.-March, pp.28-41, 1909.

ESKIMO AND ALEUT STORIES FROM ALASKA by F. A. Golder.

Jour. Am. Folk-Lore XXII, No.83,Jan.-March, pp.10-24, 1909.

M.C.H.

Legend of the Arrowhead.

"Long ago the Indians who inhabited the beautiful San Bernardino Valley grew rich because of the fertile soil and the abundant streams that watered it. They were mighty in the land and they became selfish and proud and forgot the Great Spirit . . .and the Great Father was displeased at their ingratitude and he sent out to this people a fierce, hot Spirit from the Sun-land, who drank their streams until they sunk out of sight into the sand and drained their lakelets until only salt and bitter waters were left therein. Then the people gathered in council and built fast-fires and made offerings to appease the anger of their God. But the hot breath continued to devastate the earth and green things dried into crisp deadness and the hot earth crumbled into ashes under their feet. The cattle and all animals perished and the Sun monster left only their bleaching bones behind. Them the people were seized with pestilence and with famine. And to all their prayers and their offerings for relief from this deadly heat monster, no answer came. In despair, the wailing Indians, ..., offered to make any sacrifice — even to their most precious life — if only this devouring monster might be satisfied.

"Their chief had an only daughter, Ne-wah-na, 'the new moon maiden', who was the fairest and most beloved of all the women of their tribe. And in answer to heir last appeal a voice, borne upon the wings of a white eagle, floated downward from above, 'Give Ne-wah-na as an offering to heaven.'

"Silence fell upon all as the chief slowly arose from his place and went to his wickiup. Carefully he wrapped his daughter in her choicest robes; then he led her forth and left her to meet the fiery wrath of their destroyer. When the sacrifice was complete and Ne-wah-na was no more, the heavens opened and a white arrow of light leaped forth and struck the monster, another and another followed and at last one struck the mountainside and left there its mark. Then the blessed rain followed and water once more cooled the parched earth and ran in the empty stream beds. The heat monster writhed in agony under the cooling drops until the earth opened to swallow him. As it closed again, streams of boiling water oozed and bubbled forth from the crevices and people, bitten with famine and disease, gathered about and drank of the steaming waters and bathed in them and were healed.

"Chastened and humbled the dwellers of the valley lived for generations in quiet and plenty at the foot of the arrow-marked mountain and found relief for all their ailments in its health giving waters."

From Ingersoll's History of San Bernardino County, 375-376, 1904.

COMMON FEATURES OF MYTHS

It is interesting to note that similar conceptions concerning early inhabitants of the earth were held by widely different and widely remote tribes. Thus James Mooney tells us that the Jicarilla of northern New Mexico say that in the beginning the people could talk, the animals could talk, the trees could talk, and the rocks could talk. At this time the earth was covered with water and all things were below in the underworld. It was dark in the underworld and they used eagle plumes for torches. The people and animals that went about by day wanted more light, but the night animals, the Bear, Panther, and Owl, wanted darkness. They disputed over the matter for a long time, but finally agreed to play a game to decide the matter, which was done, resulting in the acquisition of the Sun and light.

Am. Anthropologist, Vol. XI, p. 197-198, 1898.

The close resemblance of these conceptions of the Jicarilla of New Mexico to corresponding ones of many of the California tribes is astounding

THE THEFT OF FIRE

Nearly two hundred years ago a Russian woman, Miss N. P. Dyrenkova, wrote of the important part that birds play in the cosmogonical legend of the Turki of Siberia, especially in the myth of the Theft of Fire.--Mentioned by Waldemar G. Bogoras in 1928 (as recorded about 1740).

SHASTAN ACCOUNT OF PREHISTORIC HORSES

"Many hundreds of years ago, according to the old Indians, there existed on earth a horse and a mare which were extremely small. The Indians called them by a name (sá-to-wats), which they at once applied to the first horses brought by the Spaniards. They perished long before white men ever saw California. It is possible that these liliputian ponies of the Indian fable refer to an extinct species of horse, of which the remains have been discovered by Mr. Condon, in Oregon."

Stephen Powers, Tribes of California, p. 251, 1877.

MONROEVILLE OR MONROE RANCH, COLUSA COUNTY

Justus H. Rogers, in his Colusa County, Its History and Resources, pp. 56-70, 1891, states that Monroeville--better known as Monroe's Ranch--was located near mouth of Stony Creek, and was named for U.P.Monroe, county clerk, who tried to make Monroeville the county seat from 1851-1853, ~~when~~ but the election awarded it to Colusa. Some 9 years afterwards the postoffice at Monroeville was moved to St. John. The town site of Monroeville, which was afterwards merged into a 700 acre farm, was purchased by Jubal Weston, Jr.

Aim: system complete
contains detailed account of
origin of world + everything in it.
No speculation - simply statements
of fact - of what happened.

For old world we have nothing
approaching it in completeness
- nothing but fragments.

Mythologies of Greeks + Romans
lost + obscured.

On walls of Pyramids + Book
of the Dead records a religion
already far advanced

We have fragments (of ethnic religions) from
Lithuania, + fragments of
Keltic + Teutonic from
Ireland + Iceland

But the oldest we have for any
part of Eastern Hemisphere is
from the Arabs - a pre-
Mohammedan Lunimel
of highest importance -
showing resemblance to
early American mythology.

[Contin

Contin (contd)

Aim: system already old
at time of first Christian
writings + earliest hieroglyphs
+ pictographs.

Uncontaminated Native stories - which contain

Aim religion - hymns into
self-existent uncreated
personages.

The First people diffused
from no altogether.

They were succeeded by Man
- the first ancestors of present Indians.

The First People were transformed
before Man came - were
transformed into animals plants
+ rocks -

White man unknown

Wiktchumne

A long time ago all the world was rock and there was no fire and no light all was darkness. The Coyote (Kai-yu,) sent his brother, Ewayet, (mountain wolf) on a journey into the mountains, saying, "Go up this way to a big lake where you will see fire," and directed him to get some of the fire.

Ewayet did as ordered by Kai-yu and after some fighting got possession of part of the fire. From this he made the moon and then made the sun and put them

in the sky. There was plenty light then and has always been ever since.

Tsohit, (the eagle) required Kai-yu to work, and he made Wu-hush-et, (the California lion) and Ewayet help him.

Kai-yu made the springs and streams, and had to work very hard. Then Tsohit and Kai-yu made Indians. And they made antelope and elk and deer and all kinds of animals good for their meat, and they put fish in the water, and they gave all these to the Indians. The Indians went all over and they killed all these

animals for their meat. Then
Kai-yu and Wuhushet and Ewayet
said, "There will be too many Indians by and bye
and they will kill us too," and Kai-yu was
sorry that he helped Tobit make
the first Indians. Wuhushet said
"They will kill us if we don't go
away."

"We go up" Tobit said to Wuhushet.
"I have no feathers and can't fly"
said Wuhushet. "I can't go up."

"Then" said Tobit "go to the mountains.
To Ewayet, he said, "Go to the hills"; and
to Kai-yu, "Go to the plains."
And they went where they were told to go and
have lived there ever since.

#

F W Stewart
Visalia

[Given as a Cahuilla Myth.]

The Classical Journal
Vol. 23, No. 3. Dec. 1927.

A DOUBLE FOR KING MIDAS

There are other rivers with golden sands besides the Phrygian Pactolus where the wealthy King Midas deposited his gold, asking for no interest And there are other myths to go with the rivers, very like the one which Ovid has preserved for us, though he had the honor of being the first one to record the story. Even our own California Indians, fat, lazy, and unimaginative though most of them seem, have a tradition which parallels the old Midas story very closely. It is indeed quite as beautiful and more modern, as it is without the happy ending.

This tradition is one of the many which are told concerning a chief of the Cahuilla Indians, a tribe now occupying the Palm Springs Indian Reservation in Southern California. The chief's name is somtimes Andreas and sometimes Ramon and sometimes Charley, depending on the narrator and his audience. An Indian audience, of course, prefers Charlie. The story says that this ancient chief did a good turn for the Great Spirit, who was appreciative, like Bacchus before him. So he promised his benefactor to grant whatever he would ask. And the foolish fellow, living up to tradition, asked that he might be clothed entirely in golden feathers. So his dress became golden, and a wonderful sight it was. But he soon discovered that his moccasins hurt his feet when he walked, and his heavy head-dress burdened his head when he moved, and his clothes kept him from bending down to drink in the stream when he was thirsty.

One might think that King Midas' handicap was the greater, since everything he touched became gold. But King Midas lived in a palace with servants to wait upon him, and it would not have troubled him much if he couldn't lean over to put on his shoes. In fact, it seems that it was hunger and thirst alone that drove him to repent of his wish. But it was a different trouble that old Andreas had. His clothes made him too stiff to jump across even the smallest brook. He could not mount his horse nor build a fire nor lie down. After a few days he knew that it was impossible for him to live thus any longer. Too much of a good sport to complain to the Great Spirit, he slid into the river and was drowned. And in confirmation of the story the Indians today point to the golden sands of the river bed, golden because mingled with them are little pieces of golden feathers. The trouble with the story is that there are at least five streams in these regions which have beds of golden sands. Thus the Indians could easily dispute over the grave of Andreas as the Greeks did over the birthplace of Homer.

The legend goes on to say that when Andreas Canyon rumbles and mutters for no reason at all, as it often does, Chief Andreas is turning over in his grave. And we are glad to know that he is not restless because of the discomfort of golden feathers, for the Great Spirit, kind as Bacchus himself, allowed him to leave his dress of gold at the bottom of the stream.

Josephine Miles.

Los Angeles High School.

VERIFICATION OF TRADITION

Many years ago, I became impressed by the scrupulous attention to every detail in the narration of Indian myths and tales of various kinds, and came to the conclusion that among the tribes studied by me personally there was every reason to believe that the tales, in the same form as at present related, had been told and retold without alteration for hundreds if not thousands of years. And I have more than once published this belief.

In looking over some back numbers of the American Anthropologist, I was pleased to discover the following statement by Frederick Webb Hodge, until recently, Chief of the Bureau of Ethnology:

"The writer has devoted considerable attention to the verification, by comparison with known occurrences, of those parts of the lore of southwestern tribes that relate to the historic period of that section, and has found that such legends have been preserved so faithfully that they coincide fully with events known to have transpired as remotely as three centuries ago. Therefore when we hear from native lips a story of ancestral deeds, apparently unprofaned by Caucasian contact and without an undercurrent of the marvelous, its integrity may usually be relied on."

Frederick Webb Hodge, <u>The Verification of a Tradition</u>, Am. Anthropologist, Vol. X, p. 299, 1897.

B E A R

APACHE TRADITION

Dr.Charlton Henry, U.S.A., is quoted as saying that the Apaches "have a tradition that in the time of Montezuma a bear went into his palace and carried away one of his daughters to a cave, where he had offspring by her."

--Schoolcraft, Indian Tribes, V, 211, 1855.

B E A R CREEK COURTSHIP CEREMONY

Major Caleb Swan, 1795, in his observations on the customs of the Creek or Muscogee Nation, says of their courtships: "The man, to signify his wishes, kills a bear with his own hands, and sends a panful of the oil to his mistress. If she receives the oil, he next attends and helps her hoe the corn in her field; afterwards plants her beans; and when they come up, he sets poles for them to run upon." Tends the corn until beans have run up poles and entwined themselves (emblematic of union and bondage), when they take each other for better or for worse. 269

In courtship he "proves his merit and abilities to her as often as he can, by presenting her, or her guardian uncles and aunts, with bear's oil, and venison of his own killing." 272

--Caleb Swan, 1795, in Schoolcraft, Indian Tribes, V, 269,272, 1855.

B E A R INDIAN SORCERY

In an article on the"practice of sorcery and medical magic by the Indian priesthood" it is said that "The bear, the buffalo, and the beaver, are manidos which furnish food."(420)

" . . the serpent, the bear, &c., &c., which are grand monedos." (438)

--Schoolcraft, Indian Tribes, V, 420,438, 1855.

In the same article is a lengthy description of the invocations in the aid of hunters, when they wish to be led where they may find bear. Vision, feast, &c., described in detail.

--Ibid 436-437.

¶The bear is formidable, and good to eat. They render ceremonies to him, begging him to allow himself to be eaten, although they know he has no fancy for it. We kill you, but you are not annihilated. His paws and his head are objects of homage--these are the last parts eaten. They clean them, ornament them, give them the pipe, and offer them food. Women do not eat these parts.

Other animals are treated similarly ffom similar reasons. They have a tradition showing how it is that the bear does not die; but I cannot induce myself to write it out. They are the metamorphoses of Ovid, rendered into Indian." 420.

Note.--Single space paragraph is a continuation of first quotation. Inadvertently omitted by typist.

BEAVER Chapter IDAHO

From Fort Hall Father De Smet ascended Snake River as far as the mouth of Henrys Fork. While in this locality in September 1841 he writes:

"The Beaver seems to have chosen this country for his own. Everyone knows how they work, and what use they make of their teeth and tail. What we were told by the trappers is probably unknown to many. When they are about constructing a dam, they examine all the trees on the bank, and chose the one that is most bent over the water on the side where they want to erect their fort. If they find no tree of this kind they repair to another place, or patiently wait till a violent wind gives the requisite inclination to some of the trees. Some of the Indian tribes believe that the beavers are a degraded race of human beings, whose vices and crimes have induced the Great Spirit to punish them by changing them into their present form; and they think, after the lapse of a number of years, their punishment will cease, and they will be restored to their original shape. They even believe that these animals use a kind of language to communicate their thoughts to each other, to consult, deliberate, pass sentence on delinquents &c. The Trappers assured us that such beavers as are unwilling to work. are unanimously proscribed,. and exiled from the Republic, and that they are obliged to seek some abandoned

hole, at a distance from the rest, where they spend the winter in a state of starvation. They are easily caught, but their skin is far inferior to that of the more industrious neighbors, whose foresight and perseverence have procured them abundant provisions and a shelter against the severity of the winter season. The flesh of the beaver is fat and savory. The feet are deemed the most dainty parts. The tail affords a substitute for butter."

—P. J. De Smet: Letters and Sketches, 116, 1843.

B E A R

TRADITIONS OF
"SIX NATIONS"

In "Sketches of the ancient history of the Six Nations," by David Cusic, a Tuscarora, 1825, are the following references to bear:

"In the days the king Atotarho II, about this time the Oyalkquoher, or big bear, invaded the territory of the five nations, the hunters were often attacked by these monsters. At the village of Ohiokea, situated W of Oneida creek, a small party went out to hunt, and encamped near the lake Skonyatales; one morning while they were in the camp a noise broke out in the lake, a man was sent immdiately to see the tumult, he saw a great bear on the bank rolling down stones and logs; the monster appeared to be in a great rage: a lion came out of the lake and suddenly fell upon the bear, a severe contest ensued, in the mean time the bear was beaten and was compelled to leave the bank,--the next day the men went in search of the bear, they found the bear; one of the fore legs was so heavy that two men could not lift but a hands high, they procured some of the meat for useful purposes in the time of war." (Said to have been between 800 and 1000 years "before Columbus discovered the America."). ~~p 638.~~

--David Cusic, 1825, in Schoolcraft, Indian Tribes, V, 638, 1855.

Legend of a Seneca sent to live as ambassador among the "Ottauwahs"; joined them in winter's hunt; provisions gave out; two members of the party each day killed to furnish food

"leader had commanded the people that if anyone killed a game the meat should be left with the overseer for distribution, and that who disobeyed the offender should be punished in a severest manner;" ambassador killed a bear which was distributed according to rule; later killed another secretly and for punishment he was deserted by the party; at night visited by strange young man who told him where to find game; caught 7 bears; prepared meat and oil and went to find encampment; found them destitute; gave wife and children each a spoonful of oil and they were soon relieved; fed his wife's relatives also.

--Ibid 641.

"The bear, elk and buffalo, were found in the territory of the Five Nations."--Ibid 644.

"In the reign Atotarho X, perhaps about 250 years before Columbus discovered America. The Oyalkquarkeror, Big Bear, continue invade the country at Onondaga; a party went out to hunt and encamped a day's journay distance from the Village; they hunted and killed a few deer. Onemorning a woman left the camp and was going home to pound some corn and to supply the men with provisions; but before she reached half way she was attacked by the monstrous Bear, and was soon devoured as she did not return. The men were anxiously waiting, and were suspicious about her; a man was sent to see if she was coming he advanced where she was assaulted, and discovered the place of her remains; he soon perceived her fate; he immediately

reported and the men immediately proceeded to the place; but while examining her remains the Bear made a vigorous attack; the men met a severe engagement, but in the mean time the monster was killed: they procured some of the meat for useful purposes."

--Ibid 645.

CREATION MYTH

A myth about the creation of the world, bringing in the Castor, Muskrat, and Crow, is given by Father De Smet in his Letters and Sketches. As to its source, he says: "A Canadian missionary, who lived for a long time among the savages, gives the following account of the popular tradition of the Indians respecting the creation of the world."

-- P. J. De Smet: Letters & Sketches, 40 (footnote), 1843.

Wikchumne Creation Myth - Geo. W. Stewart.

"The following tradition was obtained by George W. Stewart in 1903, from Jim Herrington, and Indian then ill and now dead, of the Wukchamni or Wiktsumne tribe of the Yokuts. This tribe lived on the Kaweah river, in the vicinity of the present town of Lemon Cove:

'Long ago the whole world was rock and there was neither fire nor light. The coyote (kaiyu) sent his brother, the wolf (ewayet, iweyit), into the mountains, telling him: "Go upward until you come to a large lake, where you will see fire. Then take some of it." The wolf did as ordered by the coyote, and after some fighting, obtained a part of the fire. From this he made the moon and then the sun, and put them in the sky. Then it was light, and has been so ever since.

The eagle (tsohit, djokhid) kept the coyote at work, and the latter made the panther (wuhuset, wohoshit) and the wolf help him. The coyote made the springs and streams. He worked very hard to do this. Then he and the eagle made people. They also made deer and elk and antelope and all game animals, and put fish into the water. They gave these animals to the people who went everywhere and killed the game for food.

The coyote, the wolf and the panther said: "In time there will be too many people and they will kill us." Now the coyote was sorry that he had helped the eagle make the people. The panther said: "They will kill us if we do not go away." "Then

go up," the eagle told him. The panther answered 'I have no feathers, I cannot fly, I cannot go up.' 'Then go to the mountains,' said the eagle. To the wolf he said: 'Go to the hills,' and the coyote: 'Go to the plains.' The three went where they were told and have lived there ever since."

Eugene L. Menefee and Fred A. Dodge: History of Tulare and Kings Counties, p. 119, Los Angeles, 1913. Historic Record Co.

Extracts from "History of San Bernardino and Riverside Counties, California; Brown and Boyd, 1922.

The Arrowhead and Legends. Coahuilla.

"Generations ago, when the evil spirit dwelt in the mountains, the Coahuillas were a race of giants and now the evil spirit took supreme delight in making life miserable for them. His favorite form of amusement was to roll down from the mountains huge bowlders upon their rancheria and to pour forth drenching floods of water over the valley. The Indians naturally enough became weary of these mischievous attentions and wishing to arrange some sort of truce, one autumn day, after the evil one had been especially active, decided to seek council with him.

"So the giant Indian chief called the 'Sacred Eagle' after first placing the white feather of a dove in his beak, sent him aloft to the abode of the evil one. The bird returned with the feather, and a score of the most powerful Indians scaled the mountainside, and the council occurred. After some discussion, it was decided to play a game of cards for the possession of the valley.

"The Indians chanting a good luck gambling song, were fast winning, when the evil one, becoming enraged, seized an ace of spades and dashed it against the mountainside with such angry force that the mountain opened, receiving him sputtering in its depths and the sulphurous hot springs at the mountain's base bear evidence of his continued presence between the rocks." p. 261

Here is another legend from the Coahuilla: "In the days of long ago, the Coahuillas dwelt across the mountains to the eastward, near San Luis Rey Mission and now although of a peace loving dispodition, they were constantly harassed by their warlike neighbors, who stole their ponies, devastated their fields and burned their jacales. At last the persecutions could no longer be endured and at command of their chief the tribesmen gathered in council for the purpose of callin g upon the God of Peace to assist and direct them to another country where they might acquire a quiet homeland.

"Now being a gentle people, so the tale runs, they found special favor with the great spirit, by whom they were directed to travel westward, and instructed that they would be guided to their new home by a fiery arrow, for which they must be constantly watching. The tribe started upon the journey, and one moonless night there appeared across the heavens a blazing arrow which took its course westward, settling upon the mountain, where the shaft was consumed by fire, but the head embedded itself, clear cut in the mountainside. The camp was arroused, and resumed their journey, and located in the shadow of the mountain whereon was the arrowhead, and lived happily." p. 261.

Another legend of the Arrowhead, given to John Brown, Jr. [?] well known pioneer of 49, by Captain Manuel Santos, of the San Manuel Mission: "A great many years ago the San Bernardino Valley was inhabited by the Cahuilla, the Serrano and the Guachama tribes of Indians, the Guachamas occupied the center of the valley.

Villages or "Rancherias" were scattered in various directions. Here the Indians lived in peace and happiness and had plenty to eat. In the valley the hare, the rabbit, the quail, the duck and the goose abounded; along the foothills and mountains the deer and bear were numerous; the acorns, the juniper berries, the pinones (pinenuts), choke cherries, mescal and tunies (prickly pear) furnished varieties of food, provided bountifully by nature, justifying the Indians in calling the valley as the place of plenty to eat.

"While enjoying this happiness these Indians discovered the curative qualities of the hot water near the base of this mountain, they gathered there, partook of this hot water, bathed in it, and covered themselves with the warm mud.

"In the course of time a village grew up, governed by one of their chiefs. Among the family of this chief was a most beautiful dusky maiden, perfect in physical stature, with bewitching eyes and long black hair over her shoulders. Two Indian braves fell in love with this charming beauty and pressed their devotions so earnestly that she found it difficult in preserving harmony between them. The observing old chief realizing the situation summoned the two lovers to appear before him, and announced their fate to them, that they must forthwith settle this love affair according to Indian custom, must fight a duel with bows and arrows, the victor to have the hand of his daughter in marriage. He commanded one of these lovers to go along the mountain range west and hunt for the hardest flint rock among the crags and peaks to make arrowheads for the points of his arrows and further directed him

to have his quiver full and ready and in two weeks' time be prepared for his antagonist; the same orders the old chief gave to the other lover, bidding him go to the eastward, along the mountain range.

TDuring these two weeks the old chief sent couriers to all the surrounding villages, Yucaipa, Potrero, Indio, Malki, Soboba, Coahuilla, Agua Caliente, Temescal, Temecula, Juapa, Guachama and Cucamunyo, inviting the Indians from these rancherias to come to his village and witness the great duel that was to take place between two Indian braves, the conqueror to have his daughter in marriage. The momentous day arrived. Hundreds of Indians arrived eager to witness the tragedy. Just before the noon hour, the dignified old chief comes out of his wigwam; his squaw follows holding her daughter's hand. The two lovers are called to appear before the chief with their bows and quivers filled with arrows pointed with arrowheads made of the hardest flint rock to be found on the mountainside. The chief makes an opening among the assembled Indians, and measures off forty paces and orders the braves to take their places and prepare for the mortal combat. Deathlike silence prevails. With deep, penetrating voice the old chief asks the braves if they are ready — both signifying by a nod of the head they are — and at the command to fire, did so with lightning rapidity, when one of the braves falls with an arrow peircing his heart. The conqueror realizing the danger he had just escaped, and the prize he had won, in this moment of triumph, approaches his victim, draws the arrow from his heart, the arrowhead saturated and dripping with blood, places it in his bow and fires it away up on the mountain side, where the winter's rains and the summer's suns have caused the arrowhead to grow and grow until it attained the size as you now see it on the mountain side,"

pp. 262-3

CUPEÑO MYTHS

E. W. Gifford, Clans & Moieties in Southern California, Univ. Calif. Pubs. in Am. Arch. & Ethn., Vol. 14, pp. 192, 199-201, 1918.

I N T R O D U C T I O N

The tales here brought together were told me by Indians belonging to a single linguistic stock--the Me-wuk. The Tribes of this stock are confined to central California, where still inhabit the west slope of the Sierra from the Middle Fork of Consumnes River south to Fresno Creek, and in the early days extended westerly over the great interior valley to the islands between the mouths of the Sacramento and San Joaquin rivers, close to Suisun Bay. North of San Francisco Bay vanishing remnants of related tribes still exist on the shores of Tamales and Bodega Bays, and on Putah Creek in Lake County.

As the tribes composing the Me-wuk stock show varying degrees of kinship, so their myths show varying relationships. Those of the Sierra region are the most closely interrelated; those of the San Francisco Bay region and northward are the most divergent.

In order to understand how it is possible that tribes living in close proximity could have developed such differences in their mythologies, it is necessary to know that the California tribes are stationery--not nomadic; that they have lived for thousands if not hundreds of thousands of years in the same places that they

now occupy, or did occupy until driven away by the whites; and that during this long period of self imposed isolation they have evolved different languages--for in many cases, even among tribes of the same linguistic stock, the differences in language are so great that a member of one tribe cannot understand the speech of another.

The Mythology of the Indians of California goes back much farther than our mythology. It goes back to the time of the FIRST PEOPLE--curious beings who occupied the country for a long period before man was created, and who were finally transformed into animals, trees, rocks, and also in some cases in to stars and other celestial bodies or forces.

The myths in the present volume tell of the doings of the FIRST PEOPLE--of their search for fire, of their hunting exploits, of their adventures of various kinds, including battles with giants; of the creation of Indian people by the divinity called Coyote-man, and finally, of the transformation of the FIRST PEOPLE into animals or other nature objects.

Some tell of a flood, when only the tops of the highest moun tains broke the water; others of a cheerless period of cold and

darkness before the acquisition of fire or sun--which was always a long way off but was finally discovered and brought to the people. Fire in these early myths is either identical with sun and light, or is easily transformed into one or the other.

The more important features of Me-wuk mythology may be summarized as follows:

1. The existence of a FIRST PEOPLE, beings who differed materially from the present Indians, and who, with the possible exception of a few of the divinities, were transformed into animals, trees, rocks, or celestial bodies immediately before the present Indians were created.

2. The pre-existence of Coyote-man, the Creator, a divinity of obscure origin and unlimited 'magic' ,whose influence was always for good[1].

3. The existence (in some cases pre-existence) of other divinities, notably Wekwek the Falcon, grandson and companion of Coyote-man and Pe-ta-le the Lizard who assisted Coyote-man

[1] Except in the Wipa myths, which bear evidence of contamination from contact with neighboring tribes, Coyote-man is the Creator, and his influence is always for good. This is widely different from his position in the myths of adjacent tribes on the north, for among the Midoo, according to Rowland Dixon, he is usually a vain trixter, and among the Wintoon, according to Jeremiah Curtain, his influence is always for evil--as it is also among the Piute.

in the creation of Indian people.

4. The creation of Indian people (the ancestors of the present inhabitants) by the transformation of feathers (usually), stick (in one instance), or clay(in one instance).

5. The theft of fire, (closely related to sun + light) which in all cases was stolen from people or divinities at a considerable distance; and its preservation ~~of fire~~ in the oó-noo or buckeye tree, where it was and still is accessible to all.

6 The existence of Rock Giants who dwell in caves & carry off & devour people.

7. The use, by the FIRST PEOPLE, of the ceremonial Round-house or Assembly-house.

The widespread belief in the origin of people from feathers accounts for the reverence shown feathers by some of the tribes. This feeling sometimes manifests itself in a great fear or dread lest the failure to show proper respect for feathers, or to observe punctiliously certain prescribed acts in connection with the use of feather articles on ceremonious occasions, be followed by illness or disaster. This awe of feathers I have observed among the Hookooeko of Tamales Bay, and also among the Calaveras County Mewuk.

The myths are told in the winter season "after the first rains",

The conception of the sky as a dome-shaped canopy the borders of which come down and rest on the earth, with four holes, usually spoken of as continually opening and closing, situated on the sides corresponding to the cardinal points--one at the north, one at the south, one at the east, and one at the west. Some tribes mention a fifth hole, in the center of the sky, directly overhead.

always at night, and usually in the ceremonial or assembly house. They constitute the religious history of the tribe, and from time immemorial have been handed down by word of mouth; from generation to generation they have been repeated, without loss and without addition.

The names of individual personages among the FIRST PEOPLE were carried on to the animals or objects which they became at the time of their final transformation, and which they still bear in the languages of the California tribes In the accompanying stories, therefore, the names of the various animals should not be regarded as referring to these animals as they exist today, but to their remote ancestors among the FIRST PEOPLE. Whatever their form--and the Indian conception seems to picture them as a sort of compromise between animal and man--their distinctive attributes were in the main those of the animals they became.

Thus Oo-soo'-ma-te's fondness for acorns was not diminished by his transformation into the Grizzly Bear; Yu'-wel's skill as a hunter did not forsake him when he turned into the Gray Fox; He-le'-jah's renown as a deer slayer lost nothing when he changed to the Cougar or Mountain Lion; Too'-pe's nocturnal habit was not abandoned when he became the Kangaroo Rat; Too'-wek's preeminence as a digger is is still conspicuous in the Badger; To-to'-ka-no's loud penetrating voice is even now a signal characteristic of the Sandhill Crane; the swiftness of flight of Wek'-wek, Hoo-loo'-e and Le'-che-che are today marked attributes of the Falcon, Dove, and Hummingbird, and Ko-to'-lah's habit of jumping into the water is perpetuated by the Frog. Such cases might be multiplied almost indefinitely.

N E E S H E N A M S

Mythology.

Bancroft, Native Races, III, pp. 531-532, 545-547,
1875.

Kahwesiktem
~~Cahuilla~~ Creation Myth (CC) Palm Springs

In the beginning of it would ~~all times~~ light and darkness came together as man and wife and to them were born two sons, Moo'-kaht and Moo-kah-tem'-mi-at.

They were contained in darkness in the bottom of it world, for at that time there were neither land nor water. The mother, darkness, was not in human form, and when the time arrived for the children to be born they climbed up out of her womb {Wht Hoo-nah-ch-kaht} on the magic wand, the sharp end of wh rested insecurely in the darkness at the bottom which its offer end swayed about as the twin boys Moo'-kaht and Moo-kah-tem'-mi-at climbed upward and cast off the foetal sacks such afterward became the source of sickness.

They climbed in darkness, for two

were neither sun nor light, and finally reached the top of the sweating mound.

Mos'-kaht reached on the north side of the top; Mos'-kah-tem'-mi-at on the south side.

Then Mos'-kaht asked, "Who is older, you or I?" His brother replied, "You are the older, for you were up first." And Mos'-kaht was the older.

Mos'kaht then called out in the darkness for Yu-lil-ch and it came; ~~to the cold~~ for Pe'-vaht ~~and~~ it was wild tobacco, and it ~~also~~ came; ~~and~~ for Kut the fire to light the fire, and it came also.

Then Mos'-kaht the older smoked first and when he had done, told his brother to reach down and take the pipe and smoke, but instead of holding it down he held it up over his brother's head, and the latter ~~clutched~~ at his hand and groped about

it t darkness but could not find
t fifi.
While they were doing this they were
continued emaying about
for it had nothing solid to rest upon
and they could not make it stay still.
They fut all kinds of ants on the
natural lukum to see if they would not
make it still, but they had no effect.
Then they fut Mó-maht to ocean
on one side and that held t natural
down and t wand became still.
Then they sent E'-sil' t coyote to
fetch various things they wanted.
Nuxt'-kaht made himself fingers, like
ours ~~fingers~~; Nuxt'-kah-tem'-mi-at made
his like a ducks foot.
They tired of t darkness and wanted
light. They worked together and made
stars, but t stars did not give light
enough to see by. Then they made
Men'-nil t moon, but the light of
moon was not sufficient. They then

tried again and tried to make Tahm'-yat
to Sun. They sat upon their hands
and ~~rubbed~~ them together and worked
to natural over until it changed and
grew to become light, when it escaped
and they could not get it back. But
next morning it rose as to Sun
and has made light for people
ever since.

Then they set to work to make people.
The younger made people, but Moo'-kaht
didn't like them and said they were no
good.

The younger said to people should live
always and never be sick, but Moo'kaht
said they would then become too numerous
and come to whole world; he said they
had better die when they grew old.

The elder asked what to people should eat.
The younger replied that they should eat
to earth. The elder said that would be
bad; they had better finish making the
earth and have it to grow things for the

people to eat.

So the brothers quarreled and Mos'-kak-tem'-mi-at to longer went away, leaving Mos'-kahs.

After awhile the first people became very numerous and quarrelled among themselves and threw stones at one another and killed one another. Then they made bows + arrows to fight with, and finally poisons. So many were killed they did not know what to do with the dead.

They called Mos'-kahs "future", and wanted to get rid of him.

They called upon the Witch Doctors — Tah'-kats = Shooting Star and Tah'-vish = Red-shafted Flicker. They said they would send Wah'-hah'-chil = Frog to kill Mos'-kahs.

Wah'-hah'-chil = Frog went down into

to ocean. When all to people were asleep he came out of the water and took some of Muso'-kahts excrement and made poison of it and gave it to Muso'-kaht to eat. Muso'-kaht ate poison and died.

Obtained from a full blood Cahuilla at Palm Springs, November 13, 1909. -Conn.

THE SUN THE MOTHER OF THE YUCHIS

Gatschet tells us that: "The Yuchis believe themselves to be the offspring of the Sun, which they consider to be a female."
--American Anthropologist, Vol. 6,No. 3, July 1893.

WATER MONSTERS IN NORTHERN CALIFORNIA by R. B. Dixon

Jour.Am.Folk-Lore XIX, Oct-Dec. p. 323, 1906.

Wintun, Chimariko, Shasta

Journal Am. Folk-Lore, Vol. 19, 1906

WATER MONSTERS IN NORTHERN CALIFORNIA.

The Indians of Trinity River, belonging to the Wintun and Chimariko stock, have a belief in a mythical animal known as a "water-panther". The animal is said to be two or three times as large as an ordinary panther, and has enormous eyes. These animals are supposed to occur in several places, but never are seen except at times of flood. At the present day they do not attack people, but formerly were said to have done so.

On the Klamath River the Shasta Indians have a related belief in a "water-dog." These live in dangerous whirlpools in the river, and appear like huge spotted dogs. They cause the death of persons by drowning. The bodies of those drowned thus are, it is thought, always found covered with spots similar to those of the "water-dog" itself.

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Roland B. Dixon.

Myths: General Features

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THE LEGEND OF THE MEDICINE TREE.

BY D. C. L.

There are several tribes of Indians in the far West who attribute to the coyote, or little wolf, as they call it, the possession of supernatural powers; and many of their traditions and legends deal with the wonderful feats it has performed. They accord to it the power of speech, and the ability to overcome and destroy any, and all, enemies it may encounter, no matter what their size or prowess. In many cases it compasses their destruction by strategy or by the practice of magic; but destroy them it invariably does. At least, so say the legends; and one of them runs in this wise:

"The coyote was once on his travels, when he was met by a grizzly bear. The bear was hungry and yet showed none of his carnivorous propensities, at first. He dissimulated and showed great friendship and generosity toward the coyote.

" 'Come with me, Sir Coyote,' he said, 'I have a large *cache* of choice meat a little way from here, and you are welcome to as much of it as you can eat. Come and feast with me.'

" 'You are very kind,' said the coyote, 'I am very hungry, and will gladly join you.'

"And they walked away together. The coyote feared treachery and kept at a safe distance behind, though the bear several times invited him to walk beside him. The coyote knew he was much quicker and more active in his movements than the bear, and was safe as long as he did not venture too near the bear. Presently they reached the place where they were going, and the bear said:

" 'Now, my little cousin, the meat is buried here, beneath this large, flat rock. Help me to move it away, and we will have a feast.'

"They both took hold of the rock, but as they did so, the bear struck at the coyote, intending to kill him, for—as you may have guessed—there was no meat *cached* there at all; and the bear had made up the story in order to get a chance to make a meal off the coyote. But the little wolf was on the alert, and dodged the blow. The bear laughed and said:

" 'Come, my little friend, I only meant that in play, and to make you lift the better'

"The coyote saw through the hypocrisy of the bear, but pretended the utmost confidence in him.

" 'I am not strong, Sir Grizzly,' he said, 'as you are, but will help you all I can. Do you raise the rock up; I will set this strong stick on end under it, and together we will go under and dig up the meat.'

"The bear assented to this, and with his powerful paws lifted one edge of the great slab, three or four feet high, when the coyote braced it with the stick. Then both started under, but the wily little wolf was careful to keep behind.

"As soon as the bear got well into the trap the wolf shot out like an arrow, taking the brace with him; the rock fell on the bear and crushed him into the earth. The wolf, determined not to be cheated out of the promised feast, made a meal off the hindlegs of the bear, which stuck out from under the rock, and then proceeded on his journey.

"He had gone but a short distance when a panther, that was waiting in the top of a tree for any prey that might come that way, sprang upon him, crushed him to the earth and killed him. But when the panther saw what manner of beast it was he had killed he would not eat, and left the carcass to the vultures.

"The coyote soon came to life again and once more resumed his travels. He had not gone far, when he saw a great Rocky Mountain ram, coming down the side of the mountain, in full charge upon him; and as the ram approached, he said:

" 'Now, you infamous little thief, I will be revenged on you. You, and your tribe, have for many Summers preyed upon the lambs and weaklings of my flocks, but have come and gone so stealthily, that I—their father—have not before seen or heard you. Now I have you on fair ground, I will impale you; I will dismember you; I will trample you into the earth.'

"As the coyote saw this third attempt upon his life in a single day, he waxed very angry. He threw his cunning to the wind, and invoked the spirits to aid him in destroying his enemy.

When the ram came at him, he stepped aside, and as he passed the coyote caught him by the hindlegs and swinging him aloft, as he would swing a rabbit, dashed his head against a tree, with such force as to scatter his brains to the four winds. One of the sheep's horns was driven into the tree so far that it was broken from the skull and remained in the tree. Then the coyote resumed his journey, and was not again beset by his enemies for many moons."

In the Cañon of Rose Fork, of the Bitter Root, near the old "buffalo trail," stands the pine tree referred to in the foregoing legend. The ram's horn is still imbedded in it, about eight feet above the ground, and is now nearly overgrown. From all appearances it must have been there, fifty years, or more. No man, now living in the country, knows, how or when, it was really placed there; but the Indians believe the foregoing to be a true history of the affair as implicitly as they believe they shall die. They call the tree, "The medicine tree;" and believe that the spirits come there every night to commune with the little wolf. No Indian ever passes the place without leaving some offering there to propitiate the spirits. When I passed it there were a string of blue beads, a bright red scarf, and a tuft of horse hair hanging on the tree; and scattered about it, on the ground, were a great many bits of bright-colored cloth, shells and curiously shaped stones and trinkets of various kinds.

Chicago, Ill.

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American Field ~~NOTES~~ April 12 1890

WASTE-BASKET OF WORDS.

The following words I have noticed in connection with pension claims from the South. I cannot state their precise locality, but I think they may nearly all be set down to Kentucky and Tennessee: —

Griff. — A certain man is described as having a "griff complexion." He belonged to a colored regiment, but the particular shade intended I am unable to say.

Hireland. — A renter or cropper.

Jin. — "I hired him to jin around my farm," apparently to "chore" or do odd jobs. Compare "gin," a trap, and the Western "traps" = miscellaneous belongings.

Long Sweetnin'. — Molasses, sugar being short sweetnin.' (Ala.)

Molly-cotton. — A rabbit. "Cotton-tail" is common at the West.

Skamped. — Grazed. "He was skamped by a ball."

Skirts. — One who claims to be a doctor testifies that a certain man "had a misery about his skirts," which appears to mean his sides. Misery is nearly universal for pain. — *H. E. Warner, Washington, D. C.*

Journ. Am. Folk-Lore, Vol. 2, No. 6. Sept. 1889.

FOLK-LORE SCRAP-BOOK.

Superstitions of the Passamaquoddies. — A correspondent of the "Lewiston (Maine) Journal," some time ago, in conversation with intelligent members of the Passamaquoddy tribe, obtained many of their beliefs and superstitions, his principal authority being their priest, Father O'Dowd, whom he quotes to the following effect: —

"The great bugbear of the Passamaquoddies is Kee-zeg-be-set, who is supposed to be a fiend or fire hobgoblin prowling around at all times and ready for any sort of mischief. They believe they see him in the night, sometimes in the form of a rabbit and again in the shape of a fish. An Indian whose conscience may smite him for wrong-doing sees a pair of red eyes staring at him as he tosses in his sleep. It is Kee-zeg-be-set. A drunken Indian beholds in his frenzy some weird shape, and cries out, 'See Kee-zeg-be-set!' The Indian mothers believe that this direful hobgoblin tries to entrap their children. As more civilized parents warn their children that if they disobey and go to some forbidden place 'the booggers will get you,' so the Indian mothers frighten their little ones with the name of 'Kee-zeg-be-set.' They drive him away with the sign of the cross. He is only one of the supernatural beings which they suppose to be hovering around them, intent on evil. 'Aboo-dom-k'n' is an evil sprite that is believed to live in the water, to cast evil spells upon Indians who may stroll along the shore, or even to seize or devour children who may be playing in the water. Aboo-dom-k'n is supposed to have a fish's body and tail, with a woman's head and hair,

Cover

7. The rainbow presages that the rain is over; also that no other un-

and corresponds to our idea of a mermaid, if we have any. The 'Lam-peg-win-wuk' are sprites who live under the water, and sometimes dance in the waves. It is probable that these are really the phosphorescent gleams made by animalculæ in the sea. The Passamaquoddies believe that up in the Canadian forest there lives a frightful and monstrous old witch called 'Kee-wowk,' who eats human flesh and has a merry feast when she gets an Indian in her fatal hug. Many a red man's bones have been ground between her teeth, they think. When Kee-wowk is attacked by man, beast, or spirit, she tears up a tree by the roots and fights her opponent with the great trunk and branches. No St. George has yet been able to overcome this Indian dragon. 'Gee-bel-lowk' is otherwise known as 'the spirit of the night air.' Many Passamaquoddies gravely tell you that they have seen him, and that he is all legs and head, having no visible body. He is seen perching in the crotch of a tree, making ugly grins at whoever looks at him. No less often the Indians think they see the 'Wu-nag-mes-wook,' little fellows who live under the rocks. They are described as having long, narrow faces, and spending their nights making inscriptions on the rocks. An old Indian told me he had not only seen many of their carvings, but had even observed the Wu-nag-mes-wook at work chiselling them.

"The Passamaquoddies still cling to their old and poetic notion of the nature of thunder. They believe that the rumble of the thunder-storm and the flashes of the lightning are the demonstrations of thunder spirits who are playing ball and shooting their arrows in the heavens. There is a tradition that a Passamaquoddy Indian one day expressed a desire that he might become 'a thunder.' All at once his companions saw him mounting to the sky in the smoke of the camp-fire. He was taken up to the abode of the thunders, placed in a long box, and, by some mysterious process, invested with the properties and existence of a thunder spirit — or as Louis Mitchell puts it, he was 'thunderfied.' He lived for seven years among the thunders, played ball with them in the sky, shot his gleaming arrows with them at the bird they are always chasing toward the south, married a female thunder spirit, and pursued an active and contented life of thunder and lightning. Seven years after his translation a violent storm passed over the encampment of the Passamaquoddies; there was an unusual and frightful contention among the thunder spirits; the rumbles were more terrific than Passamaquoddy ear had ever heard; the air smelled of brimstone; the sky blazed with red and yellow flames; the clouds opened and great forks of fire shot out of them; the rain fell in sheets; peal answered peal; one tongue of lightning spat out fire to another. The affrighted Passamaquoddies, who never had beheld such a storm, believed that the legions of thunder spirits were waging their most awful war. They fell down and crossed themselves. In the midst of their alarm they saw a human form slide down into their camp on a beam of light. It was their old friend, who had made his escape from the pursuing thunders, shaken off his 'thunderfied' existence, and returned to them. He had changed somewhat, but all his old friends knew him. He lived with the tribe till he died. Several of the Indians tell this story, and say it happened when their fathers were children, but they well remember these old men's accounts of it. These thunder spirits are supposed to shoot bolts down upon the earth. To find one of these bolts is considered the greatest of good luck. 231

"Peter Sabatis, one of the Pleasant Point tribe, has a piece of flint which he found imbedded in the earth near the roots of a spruce-tree at Spruce Harbor, that had been struck by lightning, which he and the most of his tribe believe to be a thunder bullet or 'bed-dag-k'chi-gou-san.' When the Indians find a tree that has been demolished by lightning they always dig among the roots for the thunder bullet."

Journ. Am. Folk-Lore, Vol. 3, No. 10. Sept. 1890

WA-BA-BA-NAL, OR NORTHERN LIGHTS.

A WABANAKI LEGEND.

Old Chief M'Sartto (Morning Star) had an only son, so different from the other boys of the tribe as to be worry to old chief. He would not stay and play with the others, but would take his bow and arrows, and leave home for days at a time, always going towards the north. When he came home they would say, "Where you been — what you see?" but he say nothing. At last old chief say his wife, "The boy must be watched. I will follow him." So next time M'Sartto kept in his path and travall for long time. Suddenly his eyes closed an' he could not hear; he had a curious feeling, then *know* nothing. By'm-by his eyes open in a queer light country, no sun, no moon, no stars, but country all lighted by this peculiar light. He saw many beings, but all different from his people. They gather 'round and try to talk, but he not understand their language. M'Sartto did not know where to go nor what to do. He well treated by this strange tribe; he watched their games and was 'tracted to wonderful game of ball he never saw before; it seemed to turn the light to many colors, and the players all had lights on their heads, and all wore very curious kind belts, called *Menquan*, or Rainbow belts. In few days an old man came and speak to M'Sartto in his own language, and ask him if he knew where he was. Old chief say "No." Then old man say, "You are in the country of Wa-ba-ban (northern lights). I came here many years ago. I was the only one here from the 'lower country,' as we call it; but now there is a boy comes to visit us every few days." Then M'Sartto ask how old man got there — what way he come. Old man say, "I follow path called Spirits' Path, *Ket-à-gus-wowt* (Milky-Way)." "This must be same path I come," said old chief. "Did you have queer feeling as if you lost all knowledge when you traveled?" "Yes," say old man, "I could not see nor hear." Then say M'Sartto, "We did come by same path. Can you tell me how I can get home again?" "Yes, the chief of Wa-ba-ban will send you home safe." "Well, can you tell me where I can see my boy? — the boy that comes here to visit you is mine." Then old man tell M'Sartto, "You will see him playing ball if you watch." Chief M'Sartto very glad to hear this, and when man went 'round to wigwams telling all to go have game ball, M'Sartto go too. When game began he saw many beautiful colors in the playground. Old man ask him, "Do you see your boy there?" Old chief said he did: "The one with the brightest light on his head is my son." Then they went to Chief of Northern Lights, and the

old man said, "The chief of the Lower Country wants to go home, and also wants his boy." So Chief of Northern Lights calls his people together to bid good-by to M'Sartto and his son, then ordered two *K'che Sipps* (great birds) to carry them home. When they were traveling the Milky-Way he felt the same strange way he did when going, and when he came to his senses he found himself near home. His wife very glad he come, for when boy told him his father was safe she pay no notice, as she afraid M'Sartto was lost.

THE LEGEND OF INDIAN CORN.

A long time ago, when Indians were first made, there lived one alone, far, far from any others. He knew not of fire, and subsisted on roots, barks, and nuts. This Indian became very lonesome for company. He grew tired of digging roots, lost his appetite, and for several days lay dreaming in the sunshine; when he awoke he saw something standing near, at which, at first, he was very much frightened. But when it spoke, his heart was glad, for it was a beautiful woman with long *light* hair, very unlike any Indian. He asked her to come to him, but she would not, and if he tried to approach her she seemed to go farther away; he sang to her of his loneliness and besought her not to leave him; at last she told him, if he would do just as she should say, he would always have her with him. He promised that he would. She led him to where there was some very dry grass, told him to get two very dry sticks, rub them together quickly, holding them in the grass. Soon a spark flew out; the grass caught it, and quick as an arrow the ground was burned over. Then she said, "When the sun sets, take me by the hair and drag me over the burned ground." He did not like to do this, but she told him that wherever he dragged her something like grass would spring up, and he would see her hair coming from between the leaves; then the seeds would be ready for his use. He did as she said, and to this day, when they see the silk (hair) on the cornstalk, the Indians know she has not forgotten them.

The folk-tales among the Wa-ban-aki must have been innumerable, for, though these tales are so swiftly dying out, there seem to be few things in nature for which they have no legend as to its life or beginning. The story of *Wa-ba-ban* — which I give literally as told me — was called forth by my asking, "How do you think the Indians learned to play ball?" And I find these mythical ball-players figure in many of their legends.

Mrs. W. Wallace Brown.

CALAIS, ME.

INDIAN FOLK-LORE.

[The following stories have been collected during a residence of some years among Indians who have not yet come into contact with any whites with the exception of the servants of the Hudson's Bay Company, so that these legends may fairly be considered to be free from the taint of civilization and to represent Indian stories in their primitive state. It will be noticed that the greater part of them concern the animals common to the country, especially as to the origin of anything peculiar as to size or markings on them. Animals having the gift of speech seem general both to stories of this continent and to the East, witness various stories in the "Arabian Nights' Entainments," where animals have this power. I have taken great care to make no addition to these tales, but to leave them as they were told to me. Many of them have almost a familiar look, such as the Climbing Boy, which certainly has some likeness to Jack and the Beanstalk, and the story of the Mistasoo to the Roc in Sinbad the Sailor.]

II.—The Climbing Boy.

A BOY and his two sisters lived together in a tent. One day the boy went hunting, as usual, and seeing a squirrel, he shot an arrow at it, but the arrow stuck in the tree. The boy climbed up after it; and when he came near he blew it to shake it down, but the arrow went higher up. So he climbed again and blew, but it went still higher. This lasted some hours, when he found himself able to step on to firm ground, covered with squirrel tracks and marks of all kinds of animals. After staying there some days, he returned to his sisters and told them what he had discovered. They agreed to go to his new country with him and determined to live there. So taking his magic arrow he shot it up the tree, making his sisters go up first, telling them when they came near the arrow to blow it. This they did; and in time reached the country, where they built a tent. He hunted all day and never the game was scarce. Soon he had collected enough squirrel skins for a coat, which his sisters made for him. The first day he put it on and walked away from the tent until he came to a path in the snow, when he laid himself right across the track. After he had lain there some time he saw a great, fiery wheel rolling along the path toward him, but he would not move, so the sun stopped and asked him to get out of the way, but he said he should not, when the sun rolled right over him, burning his new coat, which made him very angry. He shouted to him that he would be revenged. When he got back to his tent he had his sisters make him lines of sinew, with which he made a snare right across the path. After a time it became quite dark, when he cried out, "I have done it, I have done it." His sisters asked him what he had done. He said, "Made it dark." But he found that he would be obliged to let the sun go, for he could not see to hunt. He found on trying to release him that he burned his fingers. Then he asked the animals to help him; but they found it too hot work. At last the mouse managed to gnaw away the snare, but in doing so burned his nose. After this he lived in the sun for a long time, and married his sisters and peopled the country.

IV.—The Beaver Wife.

A man wanted a wife, so he looked about for one to please him, but could not find one among all the girls he knew. One day he met one called The Beaver. She had lovely teeth; this he noted when she laughed; so he made up his mind to marry her. He went to her father and asked him for his daughter, and was told that he might marry her if he liked, but that if he did he would have a lot of trouble; and the father refused to part with her unless the suitor promised to make a bridge across every stream he came to for her to pass dry-footed. This the suitor promised to do. He married the girl and lived very comfortably with her for two years, when he went as usual owl-hunting, leaving his wife to make a new camp. As usual, he made bridges over all the creeks he came to. At last he came to a dry one. Over this he made no bridge, but walked on for about a mile, where he hung up his bag to show where he wished the camp to be made. He then went on and made his snares. It rained while he was doing so, and he returned early expecting to find the camp. But when he came to the

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place, there was his bag but no camp. Going back to look for his wife, he came to the creek which had been dry in the morning, but was full of water; and what astonished him more was that a large beaver house was built that he had not noticed before. He then determined to break it, but while he was trying to break in, he heard his wife's voice inside telling him to go away, for his neglect to put up a bridge had changed her into a beaver. He tried many times to take the house, but always failed. His forgetfulness cost him his wife and his two children. NISTOSKESIK.

MOOSE FACTORY, Hudson's Bay, British America.

Blackfoot Mythos of the Moose-Wind

By E. Hough

CHICAGO, Ill., May, 1897.—In this story blend Ai-so pom-stan, Pah-kuk-kus and an umbrella. These be evil agencies. Yet, as in all plays, there must be also a good fairy, so now appears that beneficent genius, the FOREST AND STREAM luck, for which let no man take credit upon himself.

It is known of all men that Ai-so-pom-stan is the great cow moose which stands upon the furthest peak of the high mountains. Ai-so-pom-stan is the maker of the wind. When she moves her ears slowly, the wind is light. When she fans very hard with her ears, there is high wind and storm. This the Blackfeet will tell you.

Pah-kuk-kus is the evil spirit of mischief who lives in the North, where the Crees hunt. Pah-kuk-kus is the ghastly joke-maker of the air. He comes to the lonely hunter, who is camped in the mountains, appearing sometimes as a whirling cloud of smoke or fire or dust. He tears away lodges, and destroys *caches*, and terrifies the hunter by his presence. He is a bearer of a great gun, which he shoots off as he approaches, or sometimes, as he disappears in a trail of smoky cloud. He causes things to disappear, and breeds trouble for the hunter and his friends. Malice is his thought, and he has no pleasure except to disturb and trouble those whom he pursues. He comes usually in the storm, and perhaps grows angry, and tears trees or breaks lodge poles. You may hear him howling as the storm goes by. When you hear the voice of Pah-kuk-kus, it is time to draw the blanket close about you and to keep good watch, for evil is to come.

Forest & Stream - 482, June 19, 1897.

SIOUX MYTHS

MYTHS OF THE SIOUX. By Mrs. Marie L. McLaughlin. 8vo. Bismarck, N. D.: Bismarck Tribune Company.

The author of this collection is part Sioux by descent.

COYOTE GOES THE SUN ROAD

(A Legend of the Klamath River Indians.)

By JOHN VANCE CHENEY.

COYOTE, like some other folk we know,
Had whims. Nothing would do but he must go
The sun-road. Loping up an eastern hill,
He camped under a redwood, tall and still,
And spent the night. He knew—the cunning rover—
It was the very one the sun rolled over;
And there, at daybreak, stiff, with lifted hat,
Plump in the middle of the road he sat.
Up came the sun. "Ho, there," he cried, "make way!
Ho, there, one side! good gentleman in gray."
Coyote didn't budge. "Come, ho, there, *you!*
Run over me," he howled, "and cook me, too!"
On came the jolly sun, his face as red
As fire. "You see I *can't* turn out," he said;
"Pray you, don't be so foolish as to block
My path; get on the top of that old rock,
And jump into my lap. Cook you! not I.
It's cool and lovely, higher up the sky."
Stupid old sun! Coyote now would learn
His golden road, yes, every crook and turn;
And he would know just what the day-god did
When every night he slipt away and hid.
Coyote chuckled all that day and night,
And once more came the happy morning light.
"What! What!"—he scarcely could believe his eyes—
"The red-nosed rascal! Round and round the skies,
And, none the wiser, back here where I started!"
The sun kinked his big eye; and so they parted.

Newberry Library, Chicago.

Out West - Jan. 1907

Myth fragments from Sherman School

Sherman Bulletin.

DEVOTED TO THE INTERESTS OF SHERMAN INSTITUTE.

RIVERSIDE, CALIFORNIA, DECEMBER 29, 1909. No. 43.

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let us remedy them. We are not living for self alone. Every act and deed has its influence for good or for evil over our associates, and to a certain extent we shall all be held responsible for this influence, though we may never know the person whose life was changed by our actions and deeds. Let us resolve to throw off all evil habits that tend to destroy the mind, the body, and the soul.

Do not fill the year with neglects, postponements, and omissions or idle words and idle silences. Let us not leave behind us anything that is good and true. We are not living wisely if we are losing anything out of our hands as we go on.

In nature nothing is ever really lost. When wood is burned its form is changed, but no particle of it is wasted. The blossom is not lost when it falls off to make room for the coming of the fruit. The lovely things of childhood are not lost when they are given up for the things that displace them. Let us remember that whatever is beautiful stays in life always—only the outward form changes or perishes. We can never lose our friends. They may leave us as to their visible presence, passing from us so that we can not see them any more, but what they were to us is ours forever. What they did for us, the impressions they left upon us, the lessons they taught us, the touches they put upon our character—these we carry to our graves.

—•—

The Beginning of the World.

COYOTIE MAN was a creator. He lived in Upper Lake County, California. He had a grandson by the name of Wak-wak. Wak-wak lived with his grandfather in a round house. Coyotie Man's round house was near a very large mountain. One day Wak-wak thought he would like to see what was on the other side of this mountain, and so he asked his grandfather to let him go and see. His grandfather, Coyotie Man, gave his consent, and he started out. After he had climbed the mountain to the top he saw a beautiful lake and at the end of this lake a mountain with a sharp peak. He also saw a great many wild ducks and wild geese on the lake. Now, he had never eaten any kind of fowl except the meadow lark, and so he thought that these ducks and geese might be good to eat, but he knew of no way to kill them. He decided to go back to the round house and ask Coyotie Man. When he got back home he told his grandfather of all that he had seen and asked him how he could get the geese and ducks. Coyotie Man was supposed to be the wisest of gods, and he told Wak-wak how to make a sling and how to place the rock in it so it would kill.

The next day Wak-wak set out over the mountainous journey to the lake, carriyng his sling and buoyed up with great hopes of what he would kill. After crossing over the first large mountain he went to the mountain with a sharp peak at the end of the lake. Climbing this mountain, he saw thousands of ducks and geese swimming on the lake. He put a stone into the sling and whirled it over his head three times and away went the stone. It hit and killed every duck and goose on the lake. Now, the next thing was to get them home. He made a strong net and put every one of them in it and hauled them home. They had plenty of meat to last a long time, and after they had eaten all the ducks and geese Coyotie Man took all the feathers and put them away, because he said they might need them some time.

Wak-wak was always a good boy, but one day he was tempted to steal some money from a good man. This good man found out which way the person who stole his money went by taking a long hairpin he always wore and placing it in the flames, and whatever he wanted to know was found out by the pointing of the hairpin.

When this good man Stronghold

[Continued on page 4.]

[Continued from page 1.]

found out that the hairpin pointed toward Coyotie Man's round house he knew that Wak-wak had stolen his money. He became very angry and determined to punish him very severely. He sent a very hot flame to burn everything southwest. In the mean time Wak-wak had started home; but the thought came to him "What shall I do with the money?" He knew Coyotie Man would not listen to his stealing money. When he came to the river near the round house he dropped the money down into the water, where he could find it whenever he wanted it. Coyotie Man knew all about Wak-wak stealing the money from Stronghold, but he did not say anything to Wak-wak when he came home. Somehow or other Wak-wak's own conscience whipped him, and just before he reached the round house he saw a large cloud of black smoke coming. Then he was very much frightened and went and told Coyotie Man, but Coyotie Man told him it was the Tulies on fire. Three different times Wak-wak went in and told his grandfather that the fire was coming, and every time Coyotie Man told him the same thing until the smoke came into the round house. Then Coyotie Man went out to a certain tree and tapped it three times. The first time he tapped the tree a fountain sprang up, and the second and third times a very hard rain came down. Coyotie Man said that it would rain for forty days. It rained the forty days as he said it would, and the water rose so high that it covered all the earth and all the mountains to their highest peaks. While it was still raining Wak-wak and his grandfather floated on the water. After it had stopped raining one day Wak-wak met a little man, who told him if he would go with him he would take him where he could dry his clothes and get warm. Wak-wak let the little man pull him under the water and they went down and down until they were way down under the earth, when they came to the little man's round house. Then the little man told him he must never tell any one about the fire he had and that was all he asked of him. Then when the water all went away Wak-wak went back to his grandfather. He was very glad to get back again, and he made a firm resolution to never more to be bad again. Some weeks after the flood Coyotie Man brought out the feathers that he had saved from the ducks and geese that Wak-wak had killed, and when Wak-wak saw his grandfather with them he asked him what he was going to do with them. He told Wak-wak to follow him, which he did, and Coyotie Man scattered the feathers in pairs, male and female; and this was the origin of people in the world.—*Elsie Hebron, Piute Tribe, Ninth Grade.*

V Report of a story told at Sherman Inst. by Chas

"NOT FOR SCHOOL BUT FOR LIFE"

THE NATIVE AMERICAN

DEVOTED TO INDIAN EDUCATION

VOLUME 20 FEBRUARY 8, 1919 NUMBER 3

Lesson Suggestions--Story Telling

Jean O. Barnd

LESSON 5—*Questions*

TARANTULA AND ITS ENEMY

What is a tarantula like? 2. Will a tarantula hurt you? 3. Where do tarantulas live? 4. How do they hide their homes? 5. Is it right to kill a tarantula? 6. Have any of you seen a tarantula hawk catch a tarantula? (A tarantula hawk is like a very large wasp and has red wings.) 7. Tell all you can about what the hawk did to the tarantula.

RECITATION

1. Eleanor: A tarantula is like a very large *spider* and looks like it has *hair* all over it."

2. Gladys—"A tarantula will *bite* you and make you very sick."

3. George—"Tarantulas live in *holes* in the ground."

4. Agnes—"I saw a tarantula *hide* its hole with a *leaf.*"

5. Maidie—"I think it is *right* to kill tarantulas because they *bite* people."

6. David. I saw a tarantula hawk catch a tarantula. It *stung* the tarantula on its *neck* and the tarantula *rolled* up like a *ball.* I think the tarantula was dead."

7. Elizabeth—"I saw a tarantula hawk *pull a dead tarantula* in *hole* the *hawk* had *made.*"

Teacher—"The tarantula *does not die* when it is stung. It rolls up like it is *asleep* and the hawk *pulls* or *carries* it to its *hole.* The *hawk lays its eggs* in the tarantula and the *eggs hatch* into *worms* that look like the worms you see in a *sore* on a *horse.* The worms *eat* the *tarantula* and *g r o w* into tarantula hawks."

"We call the tarantula hawk the *tarantula's enemy* because it *catches* the tarantula and *stings* it."

wins out. He said that the boy who wins the race is not the one who starts in at full speed and lags toward the end, but the one who starts out with more composure and steadily advances. This is true, not only of foot races, but of a Christian's life. He spoke of the hardships of life and how strong efforts must be made in order to win. He told how puzzled he was when one speaker spoke of the best time to study—before or after "gym." He did not know who "gym" was, but after awhile he noticed it written and his mind was made clear on the subject. He also spoke well on the use of liquors and cigarets. He said the assistant superintendent of the Anti-Saloon League stated that the way to save the boys was to wipe out the saloons.

Curtis Stevenson was the last of the speakers and the time was short, but in a few words said much. He said he agreed with Mr. Waite of New York, who said color makes no difference; it is the principal that makes the man, and that right is right. Curtis also said that the boys from here were well treated and that he was proud of them for their prompt response when called upon.

There were over sixty present at the meeting, and at the close Ellen Dorman, president of Y. W. C. A., thanked the boys in behalf of the association for the interesting meeting which they had furnished them.

Remarkable Animal Instinct.

THIS happened some years ago as my uncle came out from the Yukon with his five hired men. At the second camp, after they left Five Fingers, along toward midnight he heard a noise like a dog howl. He knew immedately that this was a wolf. He sat up in his blanket, and as soon as he made sure it was coming toward the camp he awoke the others.

The howling came nearer and nearer. They could not see the creature until day dawned, when they discovered a large, black, man-eating wolf sitting on a log only a few yards from them. They were all surprised to see this kind of beast sitting so close without doing any harm. "There must be something wrong," said the men to each other. But after a few hours they became accustomed to seeing a man-eating wolf so close. My uncle commanded the men to move on to the next camp, and when they left the place they thought they left the wolf too. They walked along and just a few hours before reaching the third camp one of the men saw the same animal close behind. They were not alarmed, however, and paid no attention to the fierce-looking creature. That night and the fourth day passed until they were ready to start to the fourth camp. My uncle thought something must be done before anything should happen. Being a brave man, he ordered the others to start on ahead and leave him to come later.

Before the men went two hundred yards the wolf came close up to him and laid down at his feet. Then my uncle saw a piece of bone in between the wolf's teeth. He did not hesitate, but thrust his hand into the wolf's mouth and jerked it out with all his strength. The big wolf got up immediately, wagged its tail, looked into his eyes, and, coming nearer, licked his skin boots, turned and ran out of sight.

Two days later they saw the same wolf running across the road a little ahead of them, and when they came up to the place they found a young mountain sheep in the middle of the road. It had been killed and placed there by the man-eating wolf as a return for kindness.

The men let their packs down and feasted on the meat. They all gave thanks, for they were short of food and had sold all their guns for big prices before they left Five Finger Rapids.—*Lewis Shotridge, Klingit Tribe, Alaska, Seventh Grade.*

Sunday Afternoon Chapel Service.

ON Sunday afternoon Rev. [illegible] Anderson of the First [illegible] Church of Riverside pre[illegible] pils and employees [illegible] His text was ta[illegible] 11-25, inclusive.

His rema[illegible] story fro[illegible] told h[illegible] the [illegible] f[illegible]

Sherman Bull-Dec. 15, 1909.

Why the Eel has no Bones.

ALL THE FISHES were once gamblers. The eel met the sucker on the Trinity River at the mouth of the Lish-tang-a-tang Creek. It appears that the eel challenged the sucker to gamble for money. It was in the evening when the game started. They built a big fire to keep them warm and give them light. The cards they used were made of small, slender sticks, there being about four dozen of them. One of the cards was marked in the middle, and they would shuffle and mix them in their hands and then put them by their sides and the other player would guess on which side the marked stick or card was. If he guessed it he keeps his own cards. They have eleven large sticks by which they count the missed guesses. They make a bet and the game is not won until one or the other has won all the eleven sticks. They have singers and drummers who make music while the game is going on. This game between the eel and the sucker lasted till about midnight, when the eel lost all his money. He then bet his wife, and the game began again. As the sucker was a good player, he soon had won the eel's wife. The eel then had nothing left, and he decided to bet his bones, which he also soon lost, and this accounts why the eel has no bones and the sucker so many.—*Hiram Lack, Ninth Grade.*

MY TRIBE.

JAY ROE MORAGO (PIMA), FOURTH GRADE.

A LONG TIME AGO my people knew nothing about making wells, so they got up early in the morning to carry water in buckets made of pottery. They had to go a long way, so they went only once a day. Often they started as early as 2 or 3 o'clock in the morning and got to the place just at sunrise. Sometimes the Apache Indians would chase them back. These Apaches used to steal their horses, so every time a Pima killed an Apache they would have a dance and sing for two nights. But Mr. Cook came and began to teach them. After a while more white men and some women came and Mr. Cook put up a church. This man was preacher and teacher at the same time. He still lives among the Pimas. He can talk the language very well.

Sherman Board. Sept. 14, 1910

HOW THE ROBIN GOT HIS RED BREAST.

REPRODUCED BY MARIANA AGUILAR,
FOURTH GRADE (FARM).

A VERY LONG TIME AGO there was but one fire and this fire was very precious to the people. An old man and his boy watched it day and night for fear it would go out. In the north where this fire was there lived a white bear that did not like the people and he always wanted to put out the fire so it would be too cold for them to live, and then he could have the land all to himself. One time when the boy was watching the fire he was so tired he wished he could be the one resting instead of his father. He got so sleepy he fell fast asleep. The old bear was always watching for a chance to put out the fire; so as soon as the boy went to sleep he came out of his den and trampled it out. There was a robin who did like the fire and the people and he was watching too. When the bear went away the robin flew down to the fire and there was just a little spark of fire left he had not seen with his ugly old eyes. Then the robin began to fan it with his wings until he had a fire again. The fire got so hot that his breast became as red as the flames, and so poor robin flew away to cool his burning breast. Everywhere he would sit a fire sprang up, and so the people had many fires instead of one. From that day to this the robin has had a red breast.

Summer Book
June 15, 1910

The game of baseball on Saturday between our boys and Redlands high school team resulted in a defeat for us, the score being 6 to 2. We will play Orange high school team next Saturday on the grounds at Arlington.

Mrs. Solida Stevenson (formerly Tortuga) has written from Hemet, where she resides, that she will be at Sherman during Commencement. Mrs. Stevenson is president of the Alumni Association, and since her graduation in 1905 has always taken an active interest in all that pertains to the welfare of the school.

An associated press dispatch from Washington announces that Assistant Commissioner of Indian Affairs Abbott will leave there shortly and visit nearly all the Indian schools and reservations in the country. He will be absent about five months and his trip will take in the whole country, including California. Mr. Abbott will study the red man from an industrial point of view and will endeavor to learn what can be done to improve his education in agriculture.

HOW THE BEAR LOST HIS TAIL.

BY MYRTLE E. DUNCAN (UKIE), SEVENTH GRADE.

A FOX lived in a very cold reigon where there was hardly any food. One day when he was going home with a big fish he met a hungry bear. The bear thought that the fox would offer him a piece of his fish, but instead he told him how he might catch one. "Go down to the river," said the fox, "break a round hole in the ice, sit on the edge of it, and put your tail in the water. When you feel something touch your tail just give a big pull and you are sure to get a big fat fish." So the bear hurried down to the river and did just as the fox had told him. After he had sat with his tail in the ice-cold water for a long time he was sure he had a bite, so he gave a strong pull. Again and again he pulled, thinking he must have a big fish. "Won't I have a fine supper?" he said to himself, giving a quick jerk to his tail and turning around to see the fish. Alas! he saw his poor tail left frozen tight in the ice. Instead then of a fine supper the bear went home without his fish and without his tail.

PUPILS' NOTES.

THIRD GRADE.

We are glad to see Mrs. Ros
again after her long illness.

We are beginning now t
about vacation and Comme

Daniel Thomas is alway
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the barn.

I am glad Lincoln
joined our class. He
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THE SUN AND THE MOLE.

BY SOPHIA WILSON (DIGGER TRIBE), FIFTH GRADE.

A LONG TIME AGO the little Indians would go out and hunt and fish and return at night; but one little boy would not come with the rest. He was too tired. So he lay down on the ground and went to sleep and slept a long time. When he awoke he saw that the Sun had burned his coat and he was very angry and said to the Sun, "You shall suffer for this." The Sun just laughed and said, "What can you do?" The little boy said, "I'll show you what I can do." He went home and in a little hut set to work to make a trap to catch the Sun. When he had finished twisting some cord he went where the Sun came up and put the cord where the Sun would roll up and go right into it. He watched for the coming of the Sun. It soon came and, blinded by its own light, went right into the trap. It was caught. On the earth there was no sunshine and the beasts went into caves to keep warm. It grew so cold they could not stand it, and so a little Mole—brave was he—came searching for the Sun. Soon he came to where the Sun was. The Mole said, "Why do you not come and shine on the earth? We need you very much." The Mole crept closer until he reached the cord which held the Sun. He gnawed and gnawed until the cords all broke, and then the Sun rolled onward to shine again. But the little Mole was blind, and he could not see the beauty around. The little boy's mischief was of no use to any one, not even to himself.

SUNDAY SCHOOL LESSON.

May 22, 1910.

THE DEATH OF JOHN THE B

Lesson—Matt. 14:1-

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mean by these words that His disciples had never prayed, because otherwise they would never have become followers of Him. No man could come to Jesus unless the Father should draw him, and God always makes His grace dependent on prayer. Hence they must have prayed for the grace already received. When St. Paul was announced to be a convert to the true faith it was said as evidence of his conversion, "Behold, he prayeth." A man who does not pray can not receive nor retain the grace of God, because prayer is of obligation and necessary to the friendship of God.

THE SUN AND THE WIND.

BY LORENZO NOMBRIE (MISSION), FIFTH GRADE.

A LONG TIME AGO the Indians of my tribe used to talk about the Sun, and some wanted to search for it and see what it was. They discussed the subject every day for a long time, and finally a very large number of them started on a journey to the Sun. On the way many perished, some being turned into rocks because they drank water without first worshiping. They all lost their lives on the way except one man; but he was not discouraged and went on until he reached the great ocean, and his arrow conveyed him across to the opposite shore. As he journeyed along he met a little boy, who assisted him a great deal. He told the Indian to remain by a pond, to which they had come, until the next morning. The man was astonished and asked the boy why he should stay. The boy said, "Because I know you are trying to reach the Sun, and it is too hard work; but if you wait here till morning you will see the Sun's three daughters, who come here before sunrise to bathe. Hide yourself till they get in and then run straight to their wings and get the wings belonging to the youngest and do not give them up until she says, 'I'll help you.' " The man did as he was told, and when the daughter saw that she could get her wings in no other way she consented to take the Indian to her father. He found that the Sun was very busy all the time, going to work in the morning and returning in the evening, and this is the way we have day and night. When the Sun would return in the evening he would tell the man that his parents were crying for him, so the man wanted to go home. He begged the Sun to take him home, but the Sun told him he never stopped there. After awhile the Sun told the man that he would help him and that perhaps the wind would carry him over to his home; but he told the Indian if he told the people about what had happened before the end of three years that he would surely die. The Indian got safely home again, and his people urged him to tell them about where he had been until he told them, and the next day he died, and this is the way the Indians know the Sun.

PUPILS' NOTES.

FOURTH A AND FIFTH B GRADES.

Robert Brothers is an expert bass player.

Richard Curo is our new farmer now and we think he is all right.

We were glad to see so many visitors here at Sherman the other day.

Steven Meza, one of the best shoemakers in Sherman, is working out now.

Last Thursday we had an extra regimental parade. There were lots of visitors here, too.

The tailor boys are now making pants for some of the boys and are doing very good work.

Girls and boys, Commencement is nearly here. Do your best, your very best, and do it every day.

Raymond Powett says he is going to join the Pittsburg football team next year and is going to play quarter-back.

We are all very sorry to have some of our classmates miss school. We hope they will be back as soon as their eyes get well.

The engineer boys are putting in a new pipe-line for an oil-pipe to go to all the buildings for heating. It is now almost finished.

The girls in the basket-ball team get up very early to practice, for Commencement is very near now. It is said that Elsie Hebron is the best one in the team.

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stand at "attention"
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laying "The Star Span-
er." One evening last
Retreat" when the band
our national anthem these
e patriots were seen to im-
ly "uncover" and stand at
tion," seemingly with all the
otic pride and enthusiasm of the
soldiers who so gallantly fought
died for all our flag represents.
was impressive from the fact that
called to mind how careful of every
act and deed we all should be and
doubly so because of a mark of rev-
erence during the raising or lower-
ing of our national colors.

HOW THE RIVERS AND DITCHES WERE MADE.

BY ELLA SIMPSON (DIGGER), FIFTH GRADE.

A LITTLE INDIAN LAD whose name was Juan was a great wanderer. He would not stay quietly at home, but was always running away. The time at which my story is taken he went farther than usual. He walked all day and late at night he saw a light in a house far ahead of him, and he hurried to it in order to stay all night. When he reached it he found nobody at home, but he saw a bed and went to it and lay down and rolled himself up in the blankets and went to sleep. In the night a devil came and pulled the blankets off the little boy, and soon a lot of little devils came and they all played games with the little boy until he conquered all but one. Then this one and the little boy played, and finally the boy was conquered. So the wicked one told Juan to go away, but to be back on the third day, which he did. When he returned the old devil told him to go out to the mountains and dig a ditch and make the water to flow through it, and again and again he did this. That is where the rivers and ditches came from. This Indian boy started them a long time ago.

PUPILS' NOTES.

NINTH GRADE.

The senior girls are very
now working on their grad
dresses.

We think we are the mo
nate class to have Miss R
us with our song.

Elsie Hebron, one
girls, took the place
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Sherman Bull - April 20, 1910

Vol. 22, 1909.

NOTES AND QUERIES

ARIKARA CREATION MYTH. — In vol. vi of this Journal (1893), pp. 123 *et seq.*, Mr. George Bird Grinnell has published an account of the Arikara Creation myth, as recorded by Rev. C. L. Hall. In the original notes of the collector, written at Fort Berthold, in March, 1881, which are preserved in the Bureau of American Ethnology, a few data are contained which are worth preserving, since the present form of the myth contains a number of traits that are not found in the various records published by later collectors (see George A. Dorsey, "Traditions of the Arikara" [Washington, Carnegie Institution], pp. 11 *et seq.*). The variants, together with some critical and explanatory remarks kindly furnished by Mr. Grinnell, are given in the following lines.

When introducing his account, Rev. Hall says, "The following account of the creation and early history of mankind was obtained from an Arikara Indian who said he had paid a quantity of buffalo taken in hunting for the privilege of hearing it from the lips of a 'medicine-man.' The story was afterward told to him a second time, that he might remember it correctly, and he again paid for the relation. The story as told by the Indian was written down as he told it. Lately we desired to hear it again, that any mistakes might be corrected, but the narrator refused on the ground that the 'medicine-men' were displeased with him for having told the story to white people."

In the account itself the term "God" is used throughout for *Atius*. It is not stated that God made the earth, but created "a people of stone and iron." — The following is not contained in the manuscript of Rev. Hall: "Many of the people being big and heavy, and so able to move only slowly, could not reach the tops of the hills to which all tried to escape for safety, and even those who did so were drowned by the rising waters, which at last covered the whole land." — In the account of the duck and the mosquito a remark is added in Rev. Hall's version, in reference to the presence of these two animals after the deluge: "It is always thus with ducks and mosquitoes, you cannot tell where they go to, but they always come." — The obstacles met during the migrations of the tribes are recorded by Rev. Hall in the following order: First a river, which the people cross, following a fish with sharp fins on its back, that is taken out of the sacred bundle. "Some poor women and children who lagged behind, did not get across in time and were drowned in the waters and afterward transformed into fishes. Thus we see that fishes are relations of mankind." The second obstacle is a dense forest, through which the mole burrows. The laggards are transformed into moles, muskrats, beavers, and animals of like nature, that live under ground. The third obstacle is a ravine, where the laggards are transformed into birds. Mr. Grinnell has remarked in his earlier publication that the order in which the obstacles to the progress of the original company are encountered varies in the different versions given to him by various old men. A version which was told to him by Pahukatawá, who is said to have been born in 1821, declares that various tribes of the original company — among which he mentioned Arikara, Pawnee, Sioux, and Mandan — all moved together slowly from the big mountains in the south, and camped on a high hill called the Rough Butte. Another narrator spoke of this hill as the "Hard Butte

furnish me with any details in regard to the financial side of the affairs of the Society.

I can but feel that the Society has started on a new era of prosperity, and that the memory of the founder will be perpetuated in an organization and a publication worthy of him and his associates.

ALFRED M. TOZZER,
Permanent Secretary.

The following recommendations of the Secretary were adopted by the Council:—

The Tenth Memoir, "An Index to the Twenty Volumes of the Journal of American Folk-Lore," is to be printed as a Memorial Volume to the late William Wells Newell, the Founder of the Society.

It was resolved to appoint a Committee on Membership. The President appointed the following Committee: the President *ex officio*, the Editor *ex officio*, the Secretary *ex officio*, Professor Fortier, Mrs. J. G. Bourke, Miss Du Bois, Dr. Gardner, Mrs. McNeil, Mr. S. Hagar, Professor Prudden, Dr. Dorsey, Dr. Gordon, and Miss Wardle.

in the Black Hills." Pahukatawá, when telling the myth to Mr. Grinnell, said that all the Arikara passed safely over the deep ravine, which could be crossed only by aid of the bird called "striking bone;" thus implying that the laggards caught there and changed to animals belonged to other tribes.--The "Blue Mountains" are "presumed to be the Rocky Mountains."--When the people gamble, one man "lost nearly all he had and wanted to stop, but his partner would not stop. Whereupon the man said, 'You will have to take (or kill) me then.'--'Well,' answered the other; 'I will take you.' But in the next game the loser won back all he had lost, whereat the other player grew angry and the two began to fight." At that time the people divided into nine tribes.--When they reach the Missouri River (p. 124) it is said, "Now they knew what the boy meant by saying, 'We shall see life and live in it.' He meant the 'Sacred Water,' the Missouri (the breastbone of the great Mother Earth)." According to Mr. Grinnell, this name must be a translation of the Pawnee name of the Missouri River, Kits'wă'rūksti ("mysterious water").--The beans which the boy took out of the bundle are in "the gullet of a buffalo."--The incident of obtaining

the fire is not contained in Rev. Hall's version.--
The two great fires that pursue the people are not identified with the two deserted dogs, but said to be "caused by the dogs," although later on the dogs in the same version say, "We have bitten you," meaning that the fire has harmed the people.--
The record continues as told by Mr. Grinnell; but before the last paragraph on p. 127, the following incident is found: "While living near the Missouri River and planting their field the Arikara remembered those parts of the great original company who had wandered away, and concluded that the reason why they saw no more of them was because of a dense pine forest between them. They had recourse to the boy and his mysterious bundle again. In the bundle were seen birds' feathers, snake-skins, and other such things, but the first that moved was a mole who offered to make a road for one of the other tribes to return to them. The road he made is marked to-day by a very prominent break or chasm in the Black Hills. This second tribe was very glad to find a road through the forests of the Black Hills and speedily followed it. One night these strangers encamped in the Bad Lands and while they were feasting and dancing and singing there, one of them tramping about dis-

covered the wonderful formation of rocks there that has the appearance of a deserted village. It was then occupied by one of the bands of the Arikara tribe who had the first horses these strangers had ever seen, and a pair were presented to the travellers. They then came on until they reached the Missouri River, where they found four bands of Arikara living together near the great bend of the Missouri, between Crow Creek and Fort Sully. As these two horses were brought into camp they were much wondered at and so highly prized that they were called 'mysterious dogs,' and were for several days worshipped. The Arikara have kept horses ever since, as they are good for travel, and do not as dogs give out in hot weather; and they are also valuable in hunting and especially in Indian bartering. The Arikara have always kept near the Missouri River, and lived in great part by planting." Obviously this, if it belongs to the creation legend at all, is a late addition. The mythical origin of the horses is peculiar, since the Pawnee remember their first acquisitions (G. P. Grinnell, "Pawnee Hero Stories," pp. 249, 265). Mr. Grinnell, when recording the Arikara myth twenty years ago, did not hear

of horses in connection with the creation myth. Two-Crows (Kakapi'tka), then chief priest of the Arikara, told him distinctly that they had received their horses from the Omaha. They did not know what they were, nor their use, nor what they fed on.

Mr. Grinnell did not hear that the people were created by the Mother Corn, but the Arikara constantly expressed their reverence for her who gave them all their culture, taught them how to make kettles of clay, knives from stone in the ground, and how to make bows and arrows.

In regard to the term Ne-sa'ru used by G. A. Dorsey in his creation stories, Mr. Grinnell says that it is apparently the Arikara form of the Pawnee word lesharu ("chief"). It seems to mean "the chief person." Mr. Grinnell never heard this term used for Ati'us, the principal god.

Abst. Trans. Anthrop. 60 Soc. Washn, 1880-1881.
1881.

NINETEENTH REGULAR MEETING.

MARCH 2, 1880.

[Annual Address of the President.]

TWENTIETH REGULAR MEETING.

MARCH 16, 1880.

The Four Creations of Mankind—A Tualati Myth.

BY A. S. GATSCHET.

In olden times people swarmed in the region of the Columbia and Willamette rivers. No sickness prevailed and everybody grew up to old age. Five men then started out on a hunting expedition, taking with them a dog. They camped out five nights, and on the evening of the fifth day, when the the dog came home, a little girl asked: "How much game has been killed by your party?" The dog made no reply. The little girl asked the same question five times, when the dog replied: "Five were killed." After this the world turned upon itself, all human beings became stars, and there was nobody left on earth save the girl, whom the dog took to himself for a wife. She first bore to him a dog and a babe, and becoming pregnant a second time was again delivered of a babe and a dog. From these children there came other children, and the country again swarmed with people. Then one man said to another: "A new people will soon come in large numbers; we had better retire from here, or be changed into some other form, for in a short space of time there will be none of us left on earth." The man who said this was a chief, and he traveled all over the land and told everybody the same thing. When he returned to his home all the people had been transformed into the pebbles which still glitter from the bottoms of the rivers.

became greater. Finally, men became members of the council by obtaining a standard accomplishment or requisite age.

The chief, or the councilman from the family which originally furnished the chief, commenced all discussion. The others spoke in order of the importance of the families to which they belonged. Women were sometimes admitted, whose business it was to remember the proceedings and narrate them to their children. All measures were decided by a unanimous majority. If there was a difference of opinion the minority usually yielded, if not, no decision would be reached. A tribe, when very large, or the union of several small tribes of the same stock-language, was called a nation, whose government was the same as the tribe. The highest type of government was the confederacy of nations, as the Iroquois, Ottawa, Creek, and Powhatan.

The regulations of the Iroquois League when America was first settled was as follows: A council of sachems, limited in number, equal in power, a union of six nations, each remaining independent in all matters pertaining to local government. Unanimity in council, sachems voted by tribes, council open to orators of the people for the discussion of public questions—council alone deciding. Women had a veto power in declaration of war.

In 1836 the Choctaw Nation had a council of forty members elected by popular vote; chiefs had an honorary seat; were not allowed to vote, though they possessed a veto power, over which a two-thirds vote passed; chairman and officers were elected, committees appointed, speakers arose and addressed the chair, questions were put in the usual form, vote given by rising, minutes kept in English and read in Choctaw.

The confederacy is superior, and related to the nation as the nation is to the tribe and the tribe to the family, and the whole resembles our advance from the neighborhood to the county, thence to State, and finally to the union of States.

Of old there was no water on the earth; men sucked the moisture from wooden sticks, and snapped their tongue for water. Then a third people settled on the earth and became numerous. Two women stole an infant girl and kept her secretly for years. She grew up to be a maiden and went out to dig kamas. A flint-boy found her on the kamas-fields and brought her back to her mother. The two women who had stolen her became angry thereat and danced to make it rain. It rained for twenty days, and a flood covered all the mountain-tops. Everybody perished except the girl, and the flint-boy who had grown up to be a flint-man. He hid her in his armpit, and upon this the waters subsided. Perceiving the two women who had caused the rain to come down in such torrents, he put them to death, and on burning them he collected their ashes and blew them up to the sky, and said: "You shall no longer travel on earth; you shall be clouds, and only when the clouds become heavy, *then* it will rain. That is all will remain of you." This is why no one can make rain now.

Then all human beings were changed into animals that live in the water; some into salmon, some into eels, some into beavers, and other aquatic animals. Thus it came that "this our ancient people" now live in the depths of the sea. They are there as large and small salmon, lobsters, sea otters, land otters, minks, seals, and other monsters of the deep. This is the third generation of mankind.

But from the flint-boy and the girl another people grew up, and their descendants filled the world for the fourth time. In those days there lived in a lodge a poor family consisting of a woman and her husband, a son and a little daughter. One day a crow came into the lodge said to the man: "Make a bow and arrows!" When he had finished these the crow said: "Now go out out and hunt in the woods; kill the white-tailed deer, the elk, the black bear, the cougar, the wild cat, and the grizzly bear; kill all kinds of animals, eat their flesh, make blankets and dresses for yourselves from their skins which are good to wear, and grow

rich." Thus spoke the crow to the man; to the woman it said: Take a stick, sharpen the end, and dig kamas root, the wild carrot, and other eatable roots in the ground; get the wild potato out of the swamp; then you will be poor no longer; and give up the daughter to me; I shall take care of her."

Then the mother inquired of the crow: "How can you take care of my child?" The crow answered, "I shall lay her down on my wing." "But she might fall down," said the mother. "She cannot possibly fall," said the crow, "but let us see, let us try." The crow put the child on its wings; high up it went into the sky; down again it flew, wavered and beat its wings, but the child did not fall. Then the mother consented and delivered the child to the crow, which flew off.

The couple did as the crow had told them; their food became abundant; they got rich and remained in their lodges one year. In the meanwhile the crow had picked up a small pebble and threw it into the fire, near which the little girl was playing. Suddenly the pebble burst to pieces and struck the girl on her belly. Thus she became pregnant, and two months after was delivered of a son. She was but one year old when she bore that child. In five days the child talked, in ten days it walked around, in fifteen days it started out hunting birds, in twenty days it killed a pheasant, in twenty-five a young deer, in thirty a large deer, in thirty-five a young elk, in forty a large elk. Then the boy said to his grandmother, "I want to drink water." She replied, "There is no water." He said, "Wherefore is there no water?" She answered, "There never has been any water since people were created." The boy said, "It is bad that that there is no water, for pretty soon a new people will come, and water will be welcome to them. How did you do when you wanted to drink?" The grandmother said, "From the trees we peeled off the bark and sucked or lapped up the sap or moisture." The boy said, "It is not good to do so; I am going to look out for water. Do you

see the sun standing in the sky?" "Yes," replied she. "Do you see the moon? That is the place where I am going to get the water, and if there is none, I will go to the sun; perhaps they have some water there." "That's right," said the grandmother.

The boy set out and arrived at the house of the moon. The moon asked, "Where do you come from?" The boy said, "I am traveling in search of water." The moon said, "I have no water here but the sun has water. The sun is angry now, but you go there and I will give you good smelling grass to take along with you. The sun has a child, and that child will smell the grass, and then the sun will give you water." The boy said, "Hand me over the grass." And the moon gave him the grass and then the boy started out for the sun's house. There he saw the daughter of the sun. "Oh," she said, "you smell so good!" "Yea," said the boy, "I smell good! Hurry up and give me some water." And grasping a wooden vessel, he went to get water, telling her to come with him. They went to the nearest house and there he beheld water. On the shore of the lake was a canoe with two paddles lying in it. Overwhelmed with joy, the boy exclaimed, "Oh, what a nice canoe!" The sun's daughter said, "Step into it and let us play on the water; turn your face the other way." And the boy stepped into the canoe and dipped the oars in the water. "Now let us go; let us go all around, everywhere," he said to the water.

Thereupon the waters were loosened all around, everywhere the waters started and sprung up. Thus the boy first made the sea, then the larger rivers, then all the creeks, streams, and streamlets, and when he had done he exclaimed: "Now, I have made and finished all the waters, and the waters are good! When the new people arrive they will have water enough and will never be in want of it."

This was the life and end of the fourth people on earth.

THE CARLISLE ARROW ➵ A NEWSPAPER PRINTED BY INDIANS

June 4, 1915

THE LEGEND OF MENO

By Mary Wonita Kewaygeshik.

YEARS ago, there lived a young girl from the tribe of the Ottawa—a girl whom everyone admired, for she was kind and gentle to all, even to the animals, whose language she seemed to understand. Her name was Meno, and she was of humble station, being the daughter neither of a chief nor of a warrior; nevertheless, as is the custom among most tribes, she was promised in marriage to the bravest and strongest.

At this time and in this tribe lived Saga, known far and wide for his wonderful age and his appearance of youthfulness, which was produced by magic arts. Saga was greatly feared, for he was artful in the crafts of wickedness, causing misfortune, ill-luck, and sickness to fall upon those who offended or displeased him. He also knew the good things and was found useful by those towards whom he was well disposed.

Saga's rival was Mekwa, a man far below him in standing and one who was humble and kind. Mekwa loved Meno and Saga did his best to get rid of him and one day he disappeared. No one knew where he had gone.

Saga was rejoiced to think he had got rid of his rival, and proceeded to woo Meno. Meno paid no atttention to him, but showed in every way that she was pining for Mekwa. In anger, Saga changed the beautiful girl into a hideous thing—a snake.

All this time Mekwa was dreaming of winning Meno. He had killed the three lions on the bay, who came out at night with their backs all red fire. Many others had tried to kill them but had always failed; for whoever approached these lions lost his strength, not through fear but through magic influence.

Mekwa returning, elated by his wonderful exploit, found Meno gone and learned that Saga had caused her to go. Bravely Mekwa went to Saga and asked him where he had taken Meno. Saga was surprised, for because of his magic arts he thought Mekwa would not dare ask him such a question or come boldly into his presence.

Because of this insult, Saga quarreled with Mekwa. At last they decided that the stronger should have Meno. Saga was certain that he would win and began to boast to himself. Mekwa only said: "I can whirl you until you beg." Saga laughed at this; but at once he began to go round and round, rising higher and higher into the air and whirling faster and faster, and his fine feathers, which he had so carefully dyed, blew off and were scattered all around. Finally he began to be afraid, and he acknowledged that he was beaten. As he whirled, his magic power was lost and he grew into an old, old man. Many people crowded around to watch the whirling; and those who never before dared to laugh at him were now laughing at old Saga. Saga begged Mekwa for mercy and the people laughed louder and louder. Before Mekwa granted Saga's prayer, the people had laughed so long and so hard that their mouths were stretched. This is why the mouths of the Ottawas are so large.

Besides the people standing around, there were birds and beasts, also; and you can, to this day, tell which or who laughed at old Saga. Saga very quickly restored Meno to her original form and gave her to Mekwa because he was the stronger. But Mekwa's strength was not all his own; he had called on his friend, Moyyay, the Whirlwind, and Moyyay it was who had whirled old Saga about.

Up to this time, all birds on earth were white. After Saga had been conquered, the birds gathered his feathers and began to decorate themselves with them. The crow got all the black feathers, as he was greedy; and that is just why crows are so black to-day. The robin grabbed and got several kinds, and to this day he goes as a bird of several colors. The bird who was almost left out was the red-headed woodpecker. He got only one red feather. He had a very strenuous time trying to decide where he could place it to become him most. He tried it on his tail, his back, and finally his head. Then he had a hard time trying to make others used to his appearance. Most thought his head was bleeding.

The Ottawas held no grudge against Saga in spite of their big mouths; for, had it not been for his whirling, there would not be so many beautiful birds.

The Redman.-Sept. 1913. (1913.)



The Creation of the Earth.

CORA ELM, *Oneida.*



HERE are some of the old Indians who believe that for a long time the human race lived in the clouds while this earth was all covered with water and only animals existed here. One old woman who lived in the clouds had a beautiful, charming daughter, who was held in seclusion. This daughter was sent down to the earth because she had committed a sin. When the animals saw her floating from the clouds they held a council and considered the best way to protect themselves from this extraordinary being.

They decided that they would be able to protect themselves better on land than on water. The one who could hold the heaviest weight on his back was to be chosen to form the basis of land. Different ones were given a trial to prove their strength, but the turtle proved to be the strongest.

All the animals helped to construct the land on the turtle's back by bringing earth, rocks, and other material from the bottom of the sea. In a few days they had constructed a small island, and by this time the woman arrived. They found her so delightful that they decided to enlarge the island, so that more of her race might inhabit it.

Some of her race were very curious to know what became of her, so they came down to earth and found it better living on land than in the clouds.



ius who had them in his care. Close watch revealed that the boy and his snow shoes were concerned in the matter, as they had somehow supposed. When they found the track of the snow shoes led to the door of his hut, all doubts were ended. But instead of showing gratitude to their benefactor, they treated as unkindly as ever the despised little weakling who had of late so often saved them from starvation.

One night when the Quarrelers were feasting from the full pots hanging over the fire, the boy came in and begged for a small piece of blubber of which the Eskimos are excessively fond. He was refused and driven from the hut. He vanished in the darkness and was never seen again. All that remained of him was his ragged little garments found in the morning hanging on the branch of a stunted tree.

In the course of a moon's time, provisions had again given out; no easy trails were found leading to expected bounty as before, and the grumpy Quarrelers suffered. It was then that a round, sturdy man, with a good-humored smile, and attired in the finest of Arctic clothing entered the Loucheux country. He announced himself the Man in the Moon, whom they had always petitioned before starting on the hunt. He also declared that he was the unhappy lad who had smarted under their cruelty and fled to his home to escape it. In conclusion he said that on his return to the moon, which he would never again leave, he would always watch over them for the sake of the old woman who had cherished him, but in punishment for ingratitude the animals should forevermore be lean in winter and fat in summer. And this has been the case ever since.



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ESCHATOLOGY OF THE QUILEUTE INDIANS[1]

By LEO J. FRACHTENBERG

Introduction

Of the numerous phases of primitive life which confront and attract the attention of the student of primitive races, none is more interesting and none yields a better insight into the philosophical concepts of a given set of people, than the attempt, on the part of these people, to explain the mysterious causes which surround a person's death and the speculations concerning the complexion of the next world, and the forms of life assumed in the hereafter by the soul of a departed person. It is the study of eschatology, the investigations conducted into the beliefs, held by primitive races, concerning after-life and the composition of the human being, which reveal to us the deepest and minutest philosophical thoughts of primitive man. And, if it be true that the aptitude for mental achievenent of a given race may be measured by the depth of its speculations into the philosophy of life, its origin and future, as evinced in the logical beliefs held regarding souls and forms of after-life, then the American Indian, and particularly the Indian of the Northwest coast, must be regarded, on the basis of such a study (even if all other criteria were lacking) as having achieved a high stage of intellectual development. It may be safely supposed that a high mental aptitude goes hand in hand with a corresponding aptitude for attaining to a high development of certain phases of material culture, such as pottery, basketry, woodcarving, or certain accomplishments pertaining to a sea-faring life. In this respect, a close parallel suggests itself between Ancient Greece and the various units that go to make up the Northwest Coast area. In both regions, we find a high mentality closely followed by, or to put it differently, effecting, an unusual development of material culture. The Tlingit, Haida, Kwakiutl, Nootka,

[1] Published with the permission of the Smithsonian Institution.

the other hand, they may be very considerably earlier; there is always doubt. Here, however, if further examination confirms the Jemez theory, we will have a segment of culture definitely dated at both ends. Excavation would almost surely yield a sufficient amount of material to give a sound knowledge of the technique and ornamentation of the pottery. This would be of the greatest value, and would form a solid foundation upon which to work, not only forward to the later Jemez valley wares, but also back toward the less clearly defined types made in early historic and late prehistoric times.

PHILLIPS ACADEMY,
ANDOVER, MASS.

NOTE: In 1916 Mr. N. C. Nelson, of the American Museum, incidentally traversed parts of the region in which ruins of the type and period considered in the above paper occur. He observed four ruins on the Largo cañon, one near the head of the Gobernador and three directly east, near the junction of the Burns and La Jara cañons. Four additional ruins were reported to him in the Largo, two or more about halfway up the Gobernador (some of which have been excavated by Mr. Earl H. Morris) and several more were said by the forest rangers to exist on the Carriso and Burns cañons. Traces of ruins, apparently of the same type, were also found to the south, in the Puerco drainage; one being at Cuba and another about two miles west of Casa Salazar. Finally, current reports had it that other "Torreones" exist on the Los Torreones creek to the northwest of Cabezon, but these may as easily be remains of Navajo hogans.

The ruins observed all occupied conspicuous situations on the rimrock, on isolated crags or on detached blocks of rock. Those examined were uniformly small, ranging from two to six rooms. The masonry was of an ordinary type with a peculiar tendency to round off the corners. The timbers, including the notched ladders, had for the most part been cut with a metal ax. One fireplace hood was photographed. Pottery was scarce but the fragments picked up include three-color glazed ware of the Rio Grande type, early historic glazed ware, and a black-on-yellow or pink ware much resembling that found in the Keresan region near Cochiti on the Rio Grande.

Quileute, and other Indians of the Northwest coast, display certain forms of intellectual life coupled with high cultural achievements which are certainly lacking among the tribes living farther south.

This contrast is particularly strong when one compares the lewd mythology, the woeful attempts at philosophy, and the complete absence of any highly developed phases of material culture among the Indians of Oregon (such as the Coos, Siuslaw, Alsea, Molala, and Kalapuya) with the beautiful tales, the high philosophical concepts, and the accomplished forms of basketry and wood-carving of the Indians north of the Columbia river. In this connection, it may be noted that the farther north from the Columbia river we proceed, the more highly developed (intellectually and culturally) tribes we find. In other words, the Columbia river would seem to form a dividing line between two well-defined and sharply contrasted cultural areas. And, just as in Ancient Greece, or in Italy during the Renaissance, or in Germany during the classical period of Schiller and Goethe, where intellectual and cultural attainments as national assets did not interfere in the least with professions of allegiance to regional governments, so, also on the Northwest coast, the high mental and cultural development was equally shared in by all the tribes constituting that region without affecting, however, their separation into several groups and tribes. In Greece, as well as in Italy or in Germany, we deal with a more or less homogenous people bound together by ties of kinship and language, whose high traits were more national than regional in character. And, may we not assume the probability of eventual proof, that the adaptability of all Northwest Indians for a high type of culture ultimately goes back to a common source which has little, if anything, to do with contact or the influences of environment?

Before proceeding with a discussion of Quileute eschatology, it may be well to say a few words concerning the distribution and history of these people. The Quileute Indians, it will be remembered, belong, with the now extinct Chimakum tribe, to the so-called Chimakuan linguistic family. Earlier writers, and particularly Farrand, assigned three distinct dialects to this group; the Chimakum, the Quileute, and the Hoh. The latter, however,

according to a detailed investigation carried out by the present writer, shows no particular points of differentiation from the Quileute variety, and the word Hoh may be safely assumed to be a purely geographical term. On the other hand, the differences between Chimakum and Quileute are purely lexicographic in character, as is shown clearly by a comparison between the Chimakum data collected by Boas and Gibbs and my own Quileute material. Slight phonetic divergencies have been found to exist between these two dialects, the most important being the entire absence, in Quileute, of the nasals *m* and *n*, resulting in a regular substitution of *b* and *d* for the Chimakum nasals. Boas has long ago called attention to the close structural, and to some morphological, correspondence existing between the Wakashan (Kawkiutl-Nootka), Salishan, and Chimakuan languages. It will be remembered that his discoveries were based upon very meager data. Since then, extensive data have been collected and digested by Boas and Sapir in the field of Wakashan linguistics; by Boas, Teit, Haeberlin, and others in the field of Salish philology; and by the present writer in the field of Quileute and Makah linguistics. While much of this material is not yet available for comparatory purposes, enough has been published to demonstrate the soundness of Boas' original theory. The present writer has gathered sufficient data upon which to base the assumption, that these three groups of languages are genetically related and that they ultimately go back to a single common source. Tentatively, he proposes to call these linguistic stocks, the Mosan group of languages, from the fact that the numeral four, *mōs* or *bōs*, occurs in some form or other in one or more dialects composing each of the stocks treated hitherto as separate units.

The Chimakum Indians who, as has been said before, are totally extinct today, occupied a small portion of the northeastern part of Jefferson county in the state of Washington. Their Quileute cognates lived until 1854 on a small prairie in the central part of Clallam county in the same state. Since then, they have been moved farther west and occupy today a small strip of land around the mouth of the Quileute river, known as the Quileute Indian reservation. It is situated about 46 miles south of Cape Flattery

and about 50 miles north of the Quinault reservation. The Hoh Indians (about 30 in number) live some 20 miles south of the Quileute reservation. These Indians are of particular interest to the student of ethnology, because, with their Makah (Nootka) neighbors to the north, they are the only North American Indians known to have actually engaged in whale-hunting, a profession in which they have attained a great skill and high perfection. Whale-hunting was given up by the Quileute Indians some 20 years ago, but most of them are still engaged in sealing which yields a not inconsiderable part of their annual income. As a littoral people the majority of the Quileute are fishermen today, deriving most of their income from this pursuit. However, I hope to demonstrate in another paper,[1] in the course of publication in the *American Anthropologist*, that originally these Indians were hunters, *par excellence*, and that they lived much farther inland than has been the case during the last seventy years.

The material upon which this paper is based, forms part of an extensive study of Quileute ethnology and linguistics, undertaken under the auspices of the Bureau of American Ethnology, and conducted during the summer of 1915 and during the summer and fall of 1916. The writer spent most of this time on the Quileute reservation, located at Lapush, Washington. While collecting these data, particular care was taken to interrogate only such individuals as were known to be authorities in their particular subjects. Thus, the chapter on eschatology was worked out with the aid given, willingly or grudgingly, by the last surviving medicine-men of the Quileute Indians. Two of these proved rather willing informants; a third had to be coaxed and cajoled into giving information; while the fourth refused most persistently and obstinately to "reveal any secrets imparted to him by his guardian-spirit." It was suggested to me that the persistent silence of this fourth potential informant may have been due to utter ignorance on his part; but I have good reasons to believe that his reticence was the result of a misguided conservatism and of actual fear of the possible consequences for revealing sacred mysteries. It is needless for me

[1] "The Ceremonial Societies of the Quileute Indians."

to accentuate the fact that, wherever possible, the information imparted by one informant was carefully checked up with the aid of the other individuals, and that the data, thus obtained, present a fairly accurate account of the beliefs held by the Quileute Indians regarding the soul, after-life, and the country of the souls.

The Soul

The Quileutes believe that each human being, animal, and inanimate object possesses a plurality of souls which, upon the termination of the visible existence of their owners, go to the Country of the Souls. These souls or shadows, called *tē'tipa'd*, look exactly like the living being and may be taken off or put on in exactly the same manner as a snake sheds its skin. Generally, the souls complete their journey to the next world without any outside assistance; sometimes, however, the soul of a deceased relative will come up from the underworld to meet and aid the departing soul of a dying member of the same family.

The human being, according to the best authorities, consists of the body (bones and skin) called *łibē'kłis*, whose ultimate fate is of no concern to the Quileute Indians; of an inner soul, called *łibitē'tipa'd* "main, strong soul"; of an outside soul, termed *t!a'ẋkłis tē'tipa'd* "outside shadow"; of life, designated *suwā'tcaqo'łowa* "the being whereby one lives"; and of the ghost for which two distinct terms are used. The ghost of a living person is called *t!ōtsa'aqo'łowa* "the thing whereby one grows"; while that of a dead human being is alluded to as *yalā'* "ghost, devil." According to one of my informants, a similar distinction in terminology is made between the outside soul which is still part of a person and between the selfsame soul after its dissociation from the rest of the body, the latter being called *alā'łilā't.sqal*, while to the former was applied the term used above. Inasmuch, however, as the other informants claimed to be totally ignorant of such a distinction and also in view of the fact that the new term is a verbal and not nominal form, I am inclined to look upon this novel differentiation as individualistic and not original.

The combined efforts of my informants failed to bring out

clearly the exact function of the life-unit and its relative position to the other component elements of a human being. The most they ventured to say regarding it was that,

> It is distinct from the body, looks just like any of the two souls, dwells between the ghost and the outer soul, leaves the body before the departure of the latter, and may be recovered and restored to its owner by a properly qualified shaman.

Far clearer and more definite was the information obtained regarding the other parts of a human being, which may be given as follows:

The outside shadow leaves a person, as soon as he becomes sick, the inner soul departs a day or two before his death; and the ghost leaves the body at the very moment when death sets in. Death can occur only after the departure of either the inner soul or of the ghost; the loss of the outer soul does not necessarily involve death. In other words, the Quileute Indian regards sickness as a result of the departure of a person's outside soul; while death is caused by the loss of the inner soul or of the ghost.

Upon leaving the body, the outer soul goes straight to the underworld. This, however, is not the case with the inner shadow which, before going to the underworld, visits the places frequented by its owner prior to his death and bids them farewell. These wanderings last usually a week and sometimes two. Upon its arrival at the underworld the inner soul is met by the outside shadow, and the two become unified just as they were prior to their temporary dissociation. Only the outside soul can be brought back from the Land of the Shadows and restored to its owner. But if a shaman succeeds in catching the inner soul of a person, while it is still traveling and before it has descended to the Land of the Shadows, he can restore it to its owner who, thereupon, regains his health. Only such shamans are capable of intercepting the two souls who have special guardian-spirits, called *titēpa'dasił*. Such guardian-spirits are usually human beings. As has been said before, the two souls look exactly like the human being who owns them; the outside shadow, however, is somewhat darker than the inner soul. The souls of a person are his individual property and may not be sold.

The ghost of a person is a trifle longer than the rest of the body,

extending somewhat beyond the toes and above the head. The ghost leaves the body simultaneously with the setting in of death and goes directly to the underworld where it joins the two souls. It will be remembered that, as long as the inner soul is still traveling, its owner is not yet dead. Consequently, his ghost stays with him until the inner soul, having completed its wanderings, arrives in the underworld. At that self-same moment death sets in, and the ghost leaves the body in order to join the two souls. No shaman has the power to bring back a departed ghost, but their guardian-spirits enable them to see and to drive away ghosts. The ghosts sometimes come up from the underworld causing sickness among the living relatives so that these may die and join them. Occasionally they merely visit their former habitations. On all of these trips they are usually accompanied by the two souls. Ghosts travel at night only and may be heard whistling, which is their form of singing. For that reason the Quileute are forbidden to whistle at night, because it is feared this might attract a ghost to a whistling person. Ghosts never like to come up close to the village, for the smell of living beings is repugnant to them. Only shamans have the power to drive the ghosts back into the underworld. This is accomplished by means of exorcisms revealed to the shaman by his guardian-spirit. At night when the common people begin to feel creepy, in the belief that ghosts may be coming, they shoot off their guns and make other noises, in the conviction that this will keep the ghosts away from their households. Should a common person meet a ghost face to face, that person would go into convulsions and die on the spot. Ghosts of dead warriors sometimes act as protectors of the living relatives of these warriors.

The ghost has the form of a human being and is provided with hands, feet, eyes, nose, etc. His body is covered all over with moss, including the face, mouth, hair, and hands. His nose is long and hangs down as far as the chin; his eyes are large, round, and of a yellow color; he walks crooked, crossing and recrossing his legs at each step and can run very fast. He eats and drinks just like a human being. One of my informants claims to have seen a ghost during a trip to the underworld. He could not come close to him,

however, for the ghost disappeared as soon as he became aware of the intruder.

The Quileute are aware of the fact that the shadow of a person is caused by the sun. A majority of my informants claimed that it has no connection whatsoever with any of the souls; one, however, ventured the suggestion that it may in some way be related to the outer soul.

The general theory regarding death is that it was originated by Raven, and the story told of its origin differs very little from similar tales obtained among the other Indian tribes of this region. The Quileute make no distinction between natural and unnatural causes of death; by this I mean between death caused, for example, by the infliction of a wound and between death caused by the occult powers of some malicious shaman. A person simply dies, because his soul has left him, the causes which brought about this departure being immaterial.

The Country of the Souls

Having discussed the Quileute beliefs regarding the composition of a human being, we shall now proceed to a description of the Country of the Souls and of the form of life pursued by these souls after their dissociation from the body of their owners.

All souls, whether they belong to male or female beings, to good or bad people, go to the same place and traverse the same trail; excepting the souls of infants. These have a country of their own, which will be described later on.

The dwelling place of the souls is called the Country of the Ghosts and is situated way under the ground. The place and the trail leading to it have often been described by shamans who, accompanied by their guardian-spirits, used to go down there in order to bring back the souls of some of their patients. The journey could be made only by such shamans who had special guardian-spirits for that purpose. These guardians were usually dwarfs between one and two feet tall who, upon the death of one master, came back from the underworld and chose a different owner imparting to him the powers possessed by their previous master.

The underworld or Country of the Souls is situated very far from the surface of the earth. A shaman traveling there with the aid of his guardian-spirit requires two days and two nights for that trip and, be it remembered, these guardians travel with lightning rapidity. The road is good and broad, and the underworld itself is a large valley with neither hills nor mountains. Through the center of the underworld runs a river, about a quarter of a mile wide, and the souls dwell on both banks of this river, occupying houses exactly like those of the living Quileute. The river divides the underworld into two equal parts. On one side live those souls who have died long ago, while on the nearer bank dwell the souls of recently departed Indians. The river is crossed by means of a canoe, and for that reason the Quileute Indians bury their dead in canoes. The soul of a poor Indian whose relatives cannot afford a canoe-burial, crosses the river by walking on the fishtrap owned in common by all the inhabitants of the underworld. The trail is at first dark and dim but, as one progresses farther down, it becomes lighter and lighter until the Country of the Souls is reached, where the sun shines with the same brightness as in the world above.

At a distance situated about one third from the upper world there stands a house called *t!apeli'ttī* "mat-house" in which the traveling souls stay over night, resting and acquiring new strength for a continuation of their journey. The trail leads right through this house. In the morning the souls resume their journey and reach pretty soon a lake called *L!ō'lē'sida'* "sticky water" which is so situated that each soul must wade through it in order to continue the trip. The water of this lake, when partaken of by a soul, causes the actual death of its owner. Hence, a shaman going in quest of a lost soul, will always refrain from tasting this water. Beyond this lake there are berry-grounds where the souls pick salmon-berries and strawberries. These berries, too, may be eaten by the souls only. A shaman, who even touches them, drops dead. Farther down the road there is a pole stuck into the ground and continually springing over the trail. The souls have no trouble in passing by this pole. But the shaman, in order to pass by it safely, must have a special magic called *yālā'a'lo' taxē'lit* "ghost guardian,"

which causes the pole to stop its swinging motion while the shaman goes by. A shaman lacking in such a guardian-spirit can go no further and must turn back. Beyond this pole there is another obstruction in the form of a rotten log lying clear across the road in such a way that each person must step over it. And since this log keeps on shrinking and expanding just like a rubber, only a soul or a shaman having the "ghost magic" can go over it. From here on the trail becomes fine and unobstructed, ending at the very river. Extending clear across the river there is a fishtrap in which the souls catch all their fish.

The souls of recently departed people cannot cross at once to the other side. If they do so, they are driven back. They must stay on the nearer side until they have lost all scent of "recent death." The "older" souls have a sentinel on each side of the river called *tcī'ali'q!wayō'* "guardian" whose duty it is to see to it that no "new" soul comes across until the proper time has arrived. As soon as the "new" soul has completed it apprenticeship and becomes "ripe" for dwelling in the "older community," it is instructed by one of these sentinels how to act and what to do in the real Country of the Souls. New arrivals are usually met and welcomed by the souls of those relatives and friends who had preceded them into the underworld.

The grouping of the souls in the underworld corresponds to their grouping in the upper world; that is to say, souls belonging to one and the same family constitute an individual house-group and own and live in a house of their own. The Country of the Souls differs in nothing from the upper world. It is abundantly supplied with all necessities of life. Each soul pursues the same occupation as in the world above. Sickness prevails among the souls to the same degree as among the living Indians, and the soul-shamans are kept constantly busy. Good and bad weather, day and night, changes of the season prevail also in the underworld. Women bear children in the usual way, and wars are not infrequently waged among the souls. The souls have an ocean of their own, thereby giving them the opportunity to follow the whale-hunting profession. All souls stay in the underworld forever.

Animals, birds, fish, etc., dwell in special underworlds of their own. These are visited by the dead hunters and fishermen who thus obtain their necessary supplies of fresh game and fish. No one knows the exact locations of these places, nor has any living person ever been able to find out how to reach them.

Attention has been called before to the fact that, according to Quileute belief, infants and children live in a separate underworld. This is called *tcitco'otsk!ātal*, is situated south of the Country of grown-up Souls, and has a trail of its own. The same is covered with nice, green grass and is much shorter than the other road. It is not dotted with obstructions and leads right into the habitations of the souls. The whole place consists of a grass-covered valley surrounded by small hills. Swings made of poles are found everywhere and are used by the children constantly. The houses are located right behind the playgrounds. A beautiful lake is situated in the middle of this underworld, and the children bathe in it frequently. It is not known whether and what the souls of infants eat. All children are under the perpetual care of some old women called *lā'tc!ās* who stay with them all the time. No one has ever been able to find out how many of these keepers there are and how they came to live in this underworld. The children are never visited by the other souls, as there are no means of communication between the two underworlds.

NEW YORK CITY.

The Magic Origin of Fire

A Siwash Legend, as Related by "OLD MARY" to

B. M. CRYER and M. G. ROSS

LISTEN, my children, to the tale of how fire was first brought to our land.

In the old, old days there were no blazing logs or glowing embers wherewith people could cook, but out on the bare rocks they spread their food—fish and crabs and the flesh of deer, so that the rays sent by Sumshalthot might warm it through. All day they left it thus, turning the meat the next morning so that both sides might be warmed and dried by the sun.

Now Tcheetcheeken the Mink, who was sly and crafty but without patience, grew weary of waiting so long for his food and ran from one animal to another asking, "Is there no quicker way in which I can cook my meat?" But one and all laughed at him saying, "There is no heat save that sent by Sumshalthot, and how can you cook without heat?"

At length he came to the house of his grandmother, Tcheeah the Bluejay. Now Tcheeah had travelled far and seen many strange things, and in answer to his question she replied, "Yes, my son, there is another way for I myself have seen it but it is a very great magic and one man alone has the secret.

Long, long ago I flew for many days until I came to a little house which this man, Whatmak, had built beside the water. Every morning and again at night when he returned from his hunting Whatmak would take dry leaves and bark and little twigs and lay them on a flat stone in his house. Then he would take two sticks and holding one upright, the point resting upon the other, he would twist it — thus — between his hands, and from those sticks little stars would be born and fall down upon the dry leaves and twigs. These the stars would eat, growing ever bigger and more bright, blossoming into flowers of many colors which sprang from the twigs, withered and fell back whilst others bloomed in their place.

Fire the man called this magic and beside it he would set his meat stuck upon pointed sticks and before you could run five miles and back it would be cooked and ready to eat. But it was hungry magic ever demanding to be fed with sticks and pieces of wood, and when these were withheld the flowers drooped and died, and the little stars grew smaller and more dim until they also died."

Very glad was Tcheetcheeken at the words of his grandmother.

"Come with me, Tcheeah!" he cried, "Only show me the way and I will find this man and take away the fire."

So the mink and the bluejay took all the cooked meat they had and, loading their canoe, set forth to seek the fire. For many days they paddled asking of all they met, "How far away is the house of Whatmak?" and always the answer was the same—

"Better turn back and not waste your time, for this man is a mean devil and will give no one of his fire."

The mink laughed, saying, "If he will not give me some fire then I will find some way in which to take it, for no longer will I cook my food in the sun."

So they paddled on, tired though they were and hungry, for they had eaten the last of their meat. At length they came to a little house built beneath a large cedar tree.

Sumshalthot had not yet risen from his sleeping when they reached the land, so, hiding the canoe beneath some overhanging branches, they crept under the house to wait. Peeping through a crack Tcheetcheeken saw Whatmak and his wife cooking their meat by their magic fire which leaped and blazed upon its flat stone. Beside the woman lay a small child wrapped in a blanket and fast asleep.



A picturesque figure—"Old Mary," daughter of a Chemainus chief of the Cowichans

After they had eaten the woman went down to the shore to dig for clams whilst the man, taking his bow and arrows, set forth into the forest to hunt for deer. As they went Tcheeah and Tcheetcheeken crept out from their hiding place and into the house. First the mink tried to carry away the fire but so hot was the magic that his fur was all singed. Then the bluejay seized a dry stick and thrust it into the flames as she had seen the man do.

"See!" she cried, "I have made the flowers blossom!" but before she had reached the door the stick was black and cold once more.

Then said Tcheetcheeken, "Take all the meat you can carry, enough to last us until we reach our home, and run quickly to the canoe, for I have thought of a plan." So Tcheeah, gathering up all the food she could carry hastened away, and the mink, grasping the child still wrapped in its blanket, leaped into the canoe after her.

All day they lay there hidden by the branches until Whatmak and the woman returned. All through the little house and the woods outside the man and woman searched, calling to the child but no answering cry did they hear, but as they turned their eyes towards the sea they saw a canoe sailing away down the path of the setting sun. The

mink, seeing Whatmak standing upon the shore, leaned down and bit the child's foot so that it gave a loud cry. Great was the wrath of Whatmak.

"Come!" he cried to the woman, "Let us make haste after them and kill them, for they have stolen our son."

So the man and woman loaded their canoe with meat and blankets, taking also the man's spear and bow and arrows and the quatta-quatta (fire sticks). For many days and nights they paddled, asking of all they met,

"Have you seen another canoe?" and always they were given the same answer,

"Just ahead is another canoe paddled by a mink and a bluejay and with them a small child wrapped in a blanket and crying all the time."

On and on they went, sometimes seeing the other canoe but never coming close to it, on and on, day after day until at last they came to a great rock where Tcheetcheeken lived, and coming from beneath the rock they could hear the cries of their child. Striding to the stone Whatmak beat upon it with his spear.

"Come forth, Tcheetcheeken, stealer of children!" he cried, "Come forth and fight."

But sly and crafty was the mink.

"Why speak of fighting, Whatmak?" said he, "Tell me rather what price you will pay for the return of your child unhurt."

"Oh, Tcheetcheeken!" wept the woman, "Only give me back my son and many blankets shall be yours, blankets woven of wool, soft and warm, baskets also and deer meat as much as you can carry."

Loud laughed Tcheetcheeken.

"Of what use are blankets to me, woman! Give me rather the quatta-quatta wherewith I can cook my meat, and make haste in the giving lest I kill thy child."

So Whatmak taking the fire sticks from the canoe laid them at the mouth of the mink's hole, and Tcheetcheeken, after he had taken in the sticks, pushed the child out to his father.

After Whatmak had paddled away the mink came out and made a great fire, so big that all the animals from far and near saw it and came to learn more of the new magic. But Tcheetcheeken before he would give anyone the fire sticks demanded payment, of this one ten salmon, of that one a deer, so that he became very rich and with power over the other creatures.

And that is how the first fire was brought.

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THE...

Original Paper Maker

Interesting Details Concerning Hornet Nest Construction...with Progressive Photos of the Operation

..By..

LOTTIE ST. GEORGE

◆









The nest from July 30th to August 19th

THE HORNET'S nest hanging under the edge of the shed roof was about the size of a tea-cup when I first saw it, and I swung my camera into action at once. Using a portrait lens and a piece of stove pipe wire as a measure to get the proper distance, I took the pictures from time to time, at a distance of about three and a half feet.

It was interesting to see how big the nest became in a short time. It was even more interesting, however, to discover that neither the photographer nor the many friends who came to view the building operations were stung all summer.

The hornets, in their construction, prepared a pulp of gum and wood, getting the gum from the balsam and spruce trees and the wood from old weather-beaten walls and logs. These two elements they chewed together until they were of the proper consistency, then applied them, always walking backwards away from the new deposit to avoid disturbing it. I have also seen the little fellows use the gray matter at the base of the red and white pine needles for their paper. Real engineers they are, certainly.

The nursery for the young is in the form of cells, lined with white paper. During the early stages the cells are sealed with white, but the partitions about them are of gray, giving the whole a variegated appearance. The nest is begun with only a few cells, and more added as they are needed. One morning, when a worker was busy on the doorway, a nurse wished to come out, so the worker stood aside and let her pass. Somewhat later another ventured forth, but did not wait for the worker to move. She rudely knocked him off his feet and majestically went on her way.

The workers dwell in the spaces between the partitions when they are building the spaces, and one can watch them go in to see if their home is comfortable and of the right size.

The nest when I cut it off the roof was eleven by twelve inches. It was composed of four layers of cells, although the usual number in most nests, I have discovered, is three.





Side view, and cross section

Journ. Am. Folk-Lore, XIX. 1906.

DA-RA-SÁ-KWA. — A CAUGHNAWAGA LEGEND.

THE following story was obtained, along with a number of others, from James Hill, better known as "Jim Longfeather," a member of the Caughnawaga band of Indians, living near Montreal, Canada. The Caughnawaga are of Mohawk extraction, and speak a slightly modified dialect of that language. Longfeather's Indian name, "Ar-rón-ye-ók-ta," signifies, it is said, "The end of the sky." The stories obtained from him cover a variety of subjects from mythology through legends of war, witchcraft, and mystery down to humorous or exciting anecdotes of his own life. It is interesting to note, in connection with the story of Da-ra-sá-kwa, that the great horned serpent figures frequently in Iroquois legends and sometimes in those of the eastern Algonkin. The incident of the thunder attacking the horned serpents and that of the transformation produced by donning a magic shirt are also not uncommon.

Near the Mohawk village of Caughnawaga, on the St. Lawrence, there is a deep mysterious pool in the bed of the river; no one has ever succeeded in reaching its bottom, for the current comes boiling up from the depths in a way that repeatedly deflects the sounding line, and washes it out in the shallows. Beyond the pool is an island from which strange harsh cries can be heard at times — wild and mournful, like the calling of giant cranes.

Not far from this place there lived, in the old days, a bold and fearless young man named Da-ra-sá-kwa, the "gatherer of river-moss." Little he feared the mysteries of the green depths or the lonely island; every day he swam in the haunted pool. The old people had warned him again and again against its dangers, but he gave no heed to their warnings and bathed there day after day.

One evening while taking his usual swim, he was searching the shallows for a log or stone to serve as a diving-place, when he found what seemed to be a water-soaked tree-trunk lying beneath the surface. "Just the thing," thought he, and stepped upon it. What was his dismay when the log moved beneath him and began to glide toward the pool! What was his horror to find his feet stuck fast, rooted to the corrugated bark! He struggled — he fought — he screamed aloud in his terror. With one last desperate effort he tore himself free. Panting and exhausted he reached the shore; later, sore and weary, he made his way homeward. As he thought it over he made an inward vow never to visit the haunted pool again.

But when morning came his terror had vanished, leaving in its place a strong and overpowering desire to visit the scene of yesterday's

adventure. Finally he could stand it no longer, and against his own better judgment started for the river, drawn by a power beyond his understanding. As he approached the shore he saw, standing near the water's edge, a tall and fine-looking stranger, who turned at the sound of his footsteps to greet him. "Sé-ko, sé-ko!" he cried. "Sē-kó-ya!" answered Da-ra-sá-kwa. "What was the matter with you?" said the stranger, "leaving me as you did yesterday! But you cannot do it to-day. Willing or unwilling you must follow me. Gaj' ók-sa (come quickly)," and he turned toward the water. A strange power told Da-ra-sá-kwa that he must obey. Unwilling, he protested. "Do you see where you are going," he cried, "right into the water! I cannot live beneath it; it will choke me!" "Have no fear," replied the unknown. "I know what I am doing. Your business is to follow." And the waters closed above them.

As they walked along the bottom the water seemed like air to Da-ra-sá-kwa, for the stranger had put a spell upon him. Soon they came to the pool and descended into its depths. Like a bark-house it seemed, with mats upon the floor and all the pots and bowls of household use in their accustomed places. Near the centre sat an old woman and two young maidens, handsome, like Da-ra-sá-kwa's guide, but with no clothing to cover their naked bodies.

"My wife and daughters sit before you," said the stranger. "We belong to the Under-water People. Many of us lived hereabouts in former years, but now there are only two families besides my own, one of which lives in a pool near the other village of your people, the second not far away. As for the others, they are scattered far and wide, in wild rivers and lonely lakes where they will not be disturbed." So saying, he led the way into a place curtained off from the rest of the house, in which Da-ra-sá-kwa saw hanging upon pegs a number of coats or shirts of strange make and form.

"Turn them over," said the Under-water Man. Shining scales flashed before Da-ra-sá-kwa's eyes as he turned them; they were made of serpent's skin. Some had hoods, to which were attached spreading antlers, like those of deer or elk. "Put one on," commanded the stranger. Da-ra-sá-kwa hesitated. Was it safe? As he stood there, the maidens, who had entered, spoke to him. "Try it! Try it! It will not hurt you. Often we put them on and find great pleasure in them." Hardly had Da-ra-sá-kwa pulled the hooded garment over his body when he fell prone upon the ground — a gigantic O-ni-a-rĕ, or River-serpent, clad in a scaly figured hide and bearing wide sweeping antlers upon his forehead.

The others followed his example and soon the band of enormous serpents were playing in the rushing rapids; up and down they went, twisting, turning and chasing one another hither and thither, full of

fun and excitement. At last Da-ra-sá-kwa, proud of his new and beautiful shape, his brightly spotted coat and his majestic antlers, cried out to his host, "Under-water Man, your gift, these handsome clothes I wear, pleases me well. Let me show myself to my friends and kinsmen, for I want them to see how fine and grand I look." "Very well," said the other, "but let it be once and once only, and you must take great care, for we Under-water People are all under the power of the Great Spirit. If we show ourselves too often to the gaze of your people and they are frightened, he sends the thunder against us, and the lightning falls with deadly force upon the offender. So be very careful."

Then Da-ra-sá-kwa swam to the village of his people, and raised his great horned head above the torrent. "Listen!" cried he, "listen!" and all the people came running down to the shore to see a sight so strange and wonderful. "I am Da-ra-sá-kwa," he began, then told them all that had befallen him. He finished with the words, "I am Da-ra-sá-kwa. Never again use my name among you. Any child given my name would disappear forever beneath the waters of the river, just as I have done. You will never see my face again. Nĕ nĕ íh wa-kí-roh, I have spoken." As the last words left his lips he sank beneath the waters. He had spoken the truth, for never again was he seen in Caughnawaga.

M. R. Harrington.

COLUMBIA UNIVERSITY, New York City.

Out West, June 1912

The Southwest Wind Brothers *and the* Northeast Wind Brothers

Told by the Warm Spring Indians of Oregon

As recorded by Mrs. Jeremiah Curtin

IN the old time there were five Southwest Wind brothers and four Northeast Wind brothers. The Northeast Wind brothers had a sister, Teskstye. She was colder and more disagreeable than her brothers were. The Southwest Wind brothers had an old grandfather whose name was Quiquiyei.

The country was divided between the Southwest Wind brothers and the Northeast Wind brothers. The Northern country was always cold and frozen; the Southern country was dry and warm.

The Northeast Wind brothers bathed every day, but the Southwest Wind brothers bathed only once in a long time.

Once the Northern brothers said to the Southern brothers, "Let us have a wrestling match, those of us who are beaten will have our heads cut off." The eldest brother on the Southern side said, "I am willing." They were to wrestle the following day.

The eldest Southwest brother said to his grandfather, "The sister of the Northeast Wind brothers is making oil out of ice. I will catch a sturgeon and get its oil. When I am wrestling you must throw our oil, but don't throw it till Tekstye has thrown hers."

In the morning the Southwest Wind brothers went to the country of the Northeast Wind brothers. The eldest brother on each side wrestled first. When Southwest wind felt that he was growing weak he was so frightened that he called to his grandfather to throw his oil. That minute Northeast Wind's sister threw her oil made of ice, it froze the sturgeon oil, Southwest wind fell and Northeast wind cut his head off. The other Southwest Wind brothers wrestled, were thrown and their heads were cut off.

Now there was no Southwest Wind in the world, there were only the Northeast Winds and they blew all the time.

When the wrestling match was over the old grandfather of Southwest winds went home. His eldest grandson was the only one who had a wife. When Quiquiyei told the woman that all of his grandsons were dead she said, "I am going to my father, who lives in the West, but I'll leave you a sign. I'll put two feathers over the door, one is a red outside feather, the other is a brown, downy, inside feather. If I have a son the brown feather will fall, if a daughter the red feather will fall. You mustn't touch the feathers or go near them, just watch them."

Southwest Wind's grandfather and grandmother watched the feathers. When the brown, downy feather fell, they said, "We have a grandson." The old man thought a while then said to the old woman, "Maybe you touched the feathers?" "I did not," answered the old woman.

The boy grew very fast and was soon large enough to play around outside. His mother made him arrows with feathers on them and told him not to play near the house. He thought, "Why doesn't my mother want me to play near the house? I'll go back and peep in." He heard his mother crying. When she saw the boy looking at her she stopped crying, and said, "I sent you away, for I didn't want you to hear me mourn for your father, and for your uncles who were killed by the Northeast Wind brothers, but you are getting to be a young man, you must try your strength. Go far off, bathe and come back, each day go farther and bathe longer."

The boy went far, found cold springs and bathed in them. When he had bathed in many springs he said to his mother, "I am going to the place where my father and uncles were killed." He started

every municipal worker and every city striving to excel past performance and emulate the best work of others.

The wiping out of ward and party lines in city elections was at first an accompaniment of the commission government reform, but is likewise invading wider fields than that of the new municipal system. It unifies the electorate and deprives the political machines of one of their most potent agencies of division of the constituents they seek to conquer.

Like these other progressive movements, the short ballot propaganda has gained a strong impetus through the rapid advance of the commission plan; and again we find the incident separating itself from the parent reform and reaching out for a wider sphere of action. The short ballot principle—that only those offices should be elective which are important enough to attract and deserve public examination, and that very few offices should be filled by election at one time, so as to permit adequate and unconfused examination of the candidates—is invading the domains of county and state as beneficially as that of municipal government; but cities are reaping the first fruits in good measure.

Less progress as yet has been made in conscious city planning than on the other lines mentioned; but the advance recorded plainly indicates that the future American City will be developed on plans to which the citizens have previously given their assent. That we are to have the real City Beautiful, and that it will be the home of a population having time, room and opportunity to play as well as work, no student of present day tendencies can fail to foresee.

Of the democratic trend of current events, evidence abounds in every city in the country. It pervades all classes and conditions of men and is fixing the direction and setting the pace of every civic activity. He would be rash who would prescribe limits to the changes this mighty wave of popular thought and feeling will effectuate.

Pressing forward along these lines, the American City will become the abiding place of the healthiest, happiest, kindest, truest and most patriotic race on earth; and from American cities will flow help and guidance and fellowship for those that crave them, everywhere under the sun.

A Cycle *of* Smile

By Lannie Haynes Martin

I look at dawn in the face of a child
And smile in his eyes as I look;
The child cooes love to the bird in its nest
From his own little nest-built nook;
The bird sings a song of love to the flower;
The flower bares its heart to the sun;
The sun makes salute to the Lords of Light;
And the Lords of Light bow to One
Ineffable, joyous, smiling God
Who sees all—sun, flower, child, me.
And if we reflect His smile round and round,
We are arcs in a circle of smile, don't you see?—
Part of a smiling Eternity.

and traveled a long way, stubbed his toe and fell, then he turned back to get greater strength. Each day for ten days he traveled far and bathed in the coldest springs he could find, then he started to go to the place where his father was killed; again he stubbed his toe and turned back. When he stubbed his toe he knew that he hadn't strength enough yet. Four times he turned back and traveled and bathed in cold springs to gain strength. The fifth time he started with such speed that he raised a terrible dust, pulled up trees by their roots, and coming to a mountain he raised it up and threw it off to one side, and where the mountain had been there was level land. As he went along the Columbia River he tore up pine and fir trees and threw them into the water.

On the right side of the Columbia River there is a canyon. From there the young man could see the country where his father was killed. When he saw the place he felt so lonesome that he lay down on his stomach and cried; his tears are the loose stones on the ridge of the canyon.

Old Quiquiyei and his wife were freezing. Each morning the sister of Northeast Wind came and stood on their house top and made sport of them; she put out their fire, and screamed at them.

One day the old man saw that the ice in their house was melting, he cried, and said, "Oh my grandson take pity on us,".

When Southwest Wind came everything began to thaw. The grandparents said: "At daybreak each morning Tekstye, Northeast Wind's sister, comes and abuses us. She looks in at the smokehole and puts out our fire." The young man said, "Gather some strong old greasewood." They brought a greasewood bush covered with thorns. He tied it in a bunch, and said: "When Tekstye comes tell her to stoop a little lower, that you are getting old and can't see her."

Tekstye came at daybreak. The old man said, "Stoop lower, we are old, we can't see you." When she reached far in the young man struck her with the bunch of greasewood and tore her body. She screamed, "You have hurt me, you old wretches, I'll kill you!" and off she went.

The young man took his grandparents to a spring, washed and cleaned them then said, "You must catch a sturgeon for me, I have come to kill the Northeast Wind brothers and their sister."

The old man and his wife went in a canoe to spear a sturgeon. When the sturgeon floundered and made a great noise Coyote and Bluejay called from the other side of the river, "Let go of that sturgeon. What are you stealing our food for?" They got into their canoe and started to cross to where the old man was pulling in the sturgeon. That minute Southwest Wind's son came near and shook himself; waves carried their canoe away from the bank. Coyote said: "What has happened? That old man never did like this before!"

Coyote saw the old people land and saw a third person with them. The young man put the end of his little finger under the gills of the great fish, the fish was so long that its tail touched the ground, but he carried it as if it had no weight.

"That's a stranger," said Bluejay, "he is a strong man."

The old man's house had been covered with snow and ice; Coyote saw that the snow and ice had disappeared, that there was green grass around the house, and everything was bright and nice to look at.

When the Northeast Wind brothers heard that there was a stranger in old Quiquiyei's house they sent a man to say, "No man ever comes here without wrestling with the Northeast Wind brothers." The young man said, "I came to travel around, not to wrestle."

The brothers sent the same message five times. The Fifth time the young man said to Old Quiquiyei, "Take the dish of sturgeon oil and come with me, I'm going to wrestle with the Northeast Wind brothers. Even if you see me almost thrown don't throw the oil till Tekstye throws hers."

When the young man began to wrestle he made the brothers think that he was weak. Tekstye poured out her oil made of ice, so that the ground would be slippery and he would fall. Old Quiquiye threw the sturgeon oil; the eldest

Northeast Wind brother slipped and fell, then the second fell, and the third. The fourth brother said, "I don't want to wrestle with you, I want to live."

"You didn't spare my father or my uncles, come and finish," said the young man.

He squeezed Northeast Wind thin, then pounded the life out of him.

All the people whom the Northeast Wind brothers had held as prisoners were freed and went back to their homes.

When Coyote saw how strong Southwest Wind's son was he came over to his side of the river and asked, "Why don't you kill Tekstye? She is stronger and meaner than her brothers were."

Tekstye heard what Coyote said and she ran away. Southwest Wind followed; he overtook her, just as she reached the river; he struck her on the back and she fell into the water. Then he said, "You'll no longer be a great person and freeze every one. You can blow a little once in a while, then I'll come and overpower you. Rain will be your enemy too. After you blow a while and freeze up everything he and I will come and thaw out the country, warm it up, and make it beautiful and green. And so it has been.

Lonesome

By M. S. Lemmon

WHEN John Bradley's case was called he rose unsteadily and glanced about him. Strange faces—nothing but strange faces. He wondered vaguely as he stood swaying, holding to the back of the chair, how there could be so many faces and never a familiar one.

"What's the charge, officer?" demanded the white haired man on the bench.

"Intoxication, yer honor," was the reply, "or anyhow he was aslape on a binch in the park and we had a time of it getting him up, sorr."

The white haired man now turned his eyes upon John Bradley and that gentleman spoke up, the faint drawl of the West trailing quaintly through his speech, "I reckon," he said, smiling a little, "my friend over there has made one mistake. I *was* asleep,—I'd have gone to sleep sittin' on a barb wire fence, last night. But intoxicated,—Well, I haven't had the price of a drink for two days and nights."

"Give an account of yourself," said the judge, "If you were not drunk, what ailed you, and why were you asleep in a public place?"

"I wasn't drunk for the prime and excellent reason I told you just now," returned the prisoner, "and I was hungry for the same reason. I was that kind of hungry that loosens your knees and jangles the works in your head. Where I come from a man might be hungry if he's lost and clear away from human bein's, but never when there's anybody around that has a bite to offer." He paused and glanced about again with his droll smile, then added in his gentle drawl, "It's different here, everything's different,—it's a damned lonesome place, Chicago is!"

After the ripple of laughter among the spectators had been quieted and the prisoner admonished as to his choice of words, the judge proceeded with the case, "Give an account of yourself," he repeated, "Where did you come from?"

"O, I come from out west,—Montana," answered Bradley, "It's a long ways. I wisht I was back there, or rather hadn't left at all. I'd better have risked having Big Dan Grayson blow me full of holes."

"Who is he?" asked the judge. He knew he ought to be getting on with the lengthy docket ahead of him, but the man was interesting,—different—"Who is Dan Grayson?" he repeated, "is he the sheriff?"

"Who, Dan?" said Bradley, "No

HOW THE SUN AND MOON WERE MADE

A Gallinanro Legend
Recorded by George Wharton James

(When the Americans first came to California, they found living in the Russian River Valley, from Cloverdale down to the Redwood belt and south to Santa Rosa Creek, a band of Indians who were known by the name Gallinanro. It is evident that this is not an Indian name and Stephen Powers says that it comes from the fact that the Spanish named one of the chiefs of this tribe "Gallina" (a cock). The tribe is now practically extinct, only a few members remain. Their idea of a God is very vague, and tho they speak of Kal-li-kop-ti, which means the Chief above, they believe that all the work of creation was performed by the coyote. They have legends which attribute to the coyote the creation of man, of fire and the heavenly bodies. In the following story they account for the creation of the sun and moon.—Editor.)

In the early days when the world was very young there was no light anywhere. There was no day and no night as we know them for even in the night of the present time the moon and stars shine. But in those days everything was of a pitch black darkness. Yet, there were mountains and valleys, canyons and foothills, plains and deserts, just as there are now, as well as birds which flew in the air and beasts which wandered on the earth. But one can well understand that in this terrible darkness everything moved in confusion. The birds flew wildly about, sometimes dashing themselves with cruel violence against the trees and the rocks, and often falling to the ground injured so that they speedily died. The animals were in an equally bad fix for if they moved at all, as they were compelled to do in search of food, they bumped into each other and into various objects of the earth. Misery and wretchedness abounded. There were no creatures happy on the earth. And then by good fortune one day an accident happened which immediately led to a wonderful change.

The hawk was flying around in search of food when it bumped head-on into the coyote. Fortunately neither the bird nor the animal were hurt. They began to talk to each other. The hawk reproached the coyote for allowing this terrible darkness to continue. Said she: "I thought you were a wise creature and knew everything. Don't you know enough to make something that will make the earth light?" And in this manner she heaped reproach upon the coyote.

The coyote would never confess it, but there is no doubt that the fault-finding of the hawk put a new idea into his mind, and with his usual craft and cunning he immediately proceeded to take advantage of it.. "Come with me," said he to the hawk, "and I will show you what I can do!" He groped his way, guiding himself by his sense of smell, until he came to the edge of a swamp where there were a number of dry tullies and cattails. These he rolled up into two balls, one large one and one small one. Then picking up some flint he gave the two balls and the flint to the hawk and said: "Take these balls up as high as you can into the sky. As soon as you have reached the highest point, strike two of these flints together and let the spark fall into the large ball. Then throw it out into the sky. When you have done that with the large ball, do the same with the small one, throwing it also out as far as you can into the sky." The hawk did as she was told and the big ball being perfectly dry immediately flamed up and became the sun. But when she lit the small ball it turned out that some of the tullies and cattails were green and damp and therefore the little ball did not burn so well. That is why we have the bright light of sun by day and the dim light of moon by night.

THE FORUM
247 Park Avenue, New York
January 30, 19

Mr. Fredk. G. Collett,
3 City Hall Ave.,
San Francisco, Calif.
Dear Mr. Collett:

Will you favor the Editor of T
letter expressing your opinio
duty toward the Indians?

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The Californian – Feb. 1894.

THE RACE OF THE TAILS.

BY CHARLES F. LUMMIS.

"JUST one more story!" said fat Juanito, turning up an appealing eye to his grandfather. We sat around the blazing adobe hearth in the shadowy room—a curious group you might have thought. The one white face there was mine. On all the rest the leaping firelight seemed to throw only shadows, for all were dark and strange. There were fat old Lorenso, and lean old Anastacio, and tremulous Diego, and white-haired José—four ancient Indians, in the quaint garb of their people. Cuddled against them were five boys, of whom alert Ramon with his ten years was tallest. As for Juanito, who was nearly as broad as long, he could not have been more than half that age. But he was plenty old enough to be as eager as the rest for the queer fairy tales which are the first schooling of a Pueblo boy.

"Then I will tell you of the Race of the Tails," said old Lorenso, stroking the boy's soft black hair; and he went on between slow and impressive puffs of smoke:

"You know well that Too-wháy-deh, the Coyote*, is the most foolish of all beasts since all the others make sport of him. And once even the Rabbit put a trick on him, when they ran the race around the world.

"It came that one day Too-wháy-deh was wandering on the plain, very hungry, when he saw the Rabbit sitting outside his house. 'Ho!' he said in himself, 'here is the one that will be my dinner.' And to the Rabbit he said: 'So here you are, you who have treated me so! Do you know that I am going to eat you up this very now?'

"'No, Coyote-friend, do not eat me! But I will tell you what we will do. Some say that it is easier to run with a large tail, like yours, but others, that those who are short-tailed, as we are, can run fastest. Now here shall be a proof. We shall run a race around the world; and if you come in first, you shall eat me. But if I come in first, I shall eat you.'

"'Pooh!' thought the Coyote, 'but *that* is easy! For everyone knows that I can run much faster than this one. Only I am very hungry *now*.' But no one can refuse such a challenge†, so he said: 'It is well—we will run. But how?'

"'In four days,' answered the Rabbit, 'as is the custom; for you will need to practice much. We will start from my house, here, and run around the four sides of the world. You shall run upon the ground, but I will run beneath it, for so my people run best. And whichever comes back to this point first, he shall be the winner, and shall eat the other. Is it well?'

"'It is. And then I shall certainly eat you, for I shall be very hungry.'

"'The eating is the last of the race, Coyote-friend. But go now and practice running. For you are so tough that I do not know if I can eat you.'

"Too-wháy-deh went away, twisting his face; for he did not like to wait. But being very sure, he did not practice running, saying in himself: 'Pooh! why should I trouble? For I am the fastest runner in the world.' As for the Rabbit, he came out of his house every morning, and put his shirt down by the door, and went running and kicking the dust—always so that the Coyote could see him. But secretly at night he went to see his brothers, and sent word ahead to the Rabbits all around the world.

*The small prairie wolf of New Mexico.

†This rule is very strict among the Indians, even when life is the wager.

"When the fourth day came, the Coyote and the Rabbit stood side by side at the door of the Rabbit's house. They wore only the *taparabo** for running, and their faces were painted. Behind them stood two elders, and when the war-captain shouted '*Haikoo!*' one pushed the Coyote and one the Rabbit, and both sprang like arrows. The Coyote went running across the plain as no other thing can rnn; but the rabbit sprung into his hole and began to dig, throwing the dirt out behind him until it was as a cloud.

"For many days the Coyote ran, not tiring himself; for he thought: 'Why should I hurry?' but when he came to the east side of the world, he pricked up his ears. For just ahead of him a Rabbit sprang up from a hole, and taunted him, and went down again, digging so hard that the dust flew up to the sky.

"'*Pero*,' said the Coyote, 'who could think it was possible to run under the earth? I will go a little faster,' and turning around the east he went running north very swiftly. Days and days he ran, never stopping. But when he came to turn, a Rabbit popped up just ahead, and mocked him, and went down digging like a badger. At this the Coyote was troubled, and said: 'Here I have been running faster than the deer can run, and yet this slow thing without a tail surpasses me! Of a truth, they must be very wise at digging, since they go through the earth so swiftly. But *now* I will show him!' And turning his tail to catch the north wind, he flew along the west faster than an arrow. Day after day he ran, until he could see the end of the west. But just as he was coming to turn, up came a Rabbit, crying: 'Pooh! Your tail will not let you run!' Then it dived back under the earth, and the sand and pebbles flew out behind it.

"'It must be *easier* to run underground,' thought the Coyote, 'else this tailless thing-to-laugh-at could not keep up with me. But that is nothing—now I *will* run!' And he ran as he had never run before, splitting the south like the yellow lightning. But when he came to the end of the world on the south, there was the same thing. Turning, he ran up the east, twice as swiftly as before—for now he was afraid. Day after day he flashed, like the red lightning; and at last came in sight of the Rabbit's house, whence they had started. Just as he was very near, out jumped the Rabbit, very dusty, crying:

"'Ha! It's too bad to have so much tail that one cannot run. Now if you were like us, perhaps you would not be such a slow-poke. But come here, that I may eat you as agreed, though you are so tough.'

"But the Coyote, being afraid, ran away. He was the first one in the world that, having lost the game, refused to pay the forfeit; and because of that, he is despised by all animals, and they call him 'the Coward.' As for the Rabbit, they made him a counselor among the four-feet, for his wisdom."

"But how could he run so fast under ground?" cried Juanito, whose big eyes had been growing bigger all the time.

"Ho! He did not run at all, you!" interposed Ramon, with all the superior wisdom of ten years. "He told his brothers, and they showed themselves at the four turning-points of the world, looking just like him. But *he* stayed at home, until he saw that *tou-too-dĕh*, the Coyote, coming back!"

"Is that the way?" said Juanito, drawing a long breath.

"That is the very way," answered the old man gravely. "And that was the Race of the Tails."

*Breech-cloth.

Myths - Calif. Misc.

FORTUNA, CAL. ADVANCE
October 3, 1924

MILORED RING GETS INDIAN LEGENDS

264

Mildred Ring returned last week from a six weeks' visit with the Indians in the Klamath river section, where she secured a number of highly prized relics and gathered for future publication from the Klamath Indians their legends.

During the six weeks visit Miss Ring met the Indians in their native wigwams, sat by their camp fires and listened to the stories which are told by the older Indians. Miss Ring states that one must first gain the confidence of the old Indians before the much prized stories are forthcoming and to do this you must visit them and sit by their camp fires. During her trip she traveled from Requa to Orleans up the river. A portion of the tip was made by gasoline launch, but to complete the trip the canoe was pressed into service as well as the old reliable and surefooted pack mule. She traveled alone with her dog and states that she got lots of real enjoyment out of the trip and collected some real treasures in the way of Indian baskets and relics. These baskets will be on display for those who crae to see them at Bowman's Drug Store, Wednesday and Thursday.

RENO, NEVADA JOURNAL
October 5, 1924

INDIAN LEGEND RETOLD AS INSCRIPTIONS ARE VIEWED

2364-2

Special to The Journal

WINNEMUCCA, Oct. 2.—A strange mixture of the prehistoric and present came to light when Frank Cruthers, chief of the Paradise valley Piutes viewed ancient indian inscriptions on a ledge four miles from Paradise valley.

Frank was firm in his conviction that the coyotes made the marks. Having been persuaded to lead what is thought to be the first party of white men, ever to view the writings, Frank told a story of a tribal legend and superstition that, if true blasts the theory of evolution and also the theory that the Garden of Eden is located in Nevada, but his tale is no less interesting than the others.

Back in the days when Lake Lahonton extended over a great portion of Nevada, or maybe before that time, there lived a race of Indians in the hills near what is now Paradise valley. Those Indians went against the wishes of the Great Father and sinned. As a result they were condemned to be four footed beasts of the desert for the remainder of time. And the Piutes are known to this day to be unwilling to kill a coyote.

The story of the wayward Indians and the location of the prehistoric writings have been handed down among the Piutes from generation to generation, but all have avoided the ledge. Frank asked that he be given pictures which the members of the party took, to keep "the devil away."

The rising sun, the upraised hand, the ram's head and other hieroglyphics are depicted on the ledge.

The spot has been located as a mining claim in order to preserve it from souvenir hunters.

FRESNO, CAL., REPUBLICAN.
October 8, 1924

364

The first fall meeting of the Fowler Improvement association was held in the clubhouse yesterday afternoon, and was styled President's day. Five former presidents were present and recounted the activities of the club during their several regimes. The principal number on the program was an address by Professor T. T. Waterman of Fresno on "Indian Legends and Poetry." During his talk he illustrated the work of the Indian poets by several translations. While Indian poems do not rhyme, there is a nobility in the ideals expressed, Waterman declared, which compares favorably with that of the ancient writers. Incidentally Waterman mentioned the basketry of the Fresno Indians, and declared that they excel that

of any other group in the state. After the address refreshments were served.

BLUE LAKE, CAL., ADVOCATE
October 11, 1924

364

Got Acquainted With Klamath Indians

Mildred Ring of Fortuna returned last week from a six weeks' visit with the Indians in the Klamath river section, where she secured a number of highly prized relics and gathered for future publication from the Klamath Indians their legends.

mush, the Modoc tribe "was bravest of all" and their numbers were few. In spite of this, however, they never refused combat with their traditional enemies, the Klamaths, and usually the latter came out second best.

They lived at peace with the other tribes in the neighborhood. Seldom are wars with the Shastas and the Pitt Rivers related in their folk tales or tradition. But with the Klamaths it was otherwise. Perhaps this was because the Klamaths were their nearest neighbors. Also it may have been because the Klamaths envied the Modocs their hunting grounds in the Lost River region.

For a time, indeed, they prevailed in spite of the fewness of their number. They were brave and they fought bravely in spite of the "many, many people who came against them." Were they not fighting for the homes and the country Kumush had given them?

In their last stand against the white man they fought one of the gamest fights an Indian tribe ever fought when opposed to the might of the United States Army. In fact, so disastrous was the so-called Modoc Indian War that, in proportion to the numbers involved on both sides, it has been declared to have been the most costly in lives and money of any of the wars in which the United States has ever engaged, with the exception of the great World War.

Beginning Of End.

This last war of the Modocs was to be the beginning of the end of the "bravest of all tribes." The remnant of the tribe was transplanted to a bit of land in Kansas and later to Oklahoma, where they gradually died out. Only a few of them still live and eke out a precarious existence on a small section of the Klamath Indian Reservation.

SACRAMENTO, CAL.—BEE
JANUARY 26, 1927

364

Method Of Naming Indian Tribes In Superior California Is Told

"Kumush opened the basket and threw the bones in different directions. As he threw them he named the tribe and kind of Indian they would be. When he named the Shastas he said, 'You will be good fighters.'

"To the Pitt River and the Warm Spring Indian bones he said, 'You will be brave warriors too.' But to the Klamath Indian bones he said, 'You will be like women, easy to frighten.'

Modoc Bones Last.

"The bones for the Modoc Indians he threw last, and he said to them, 'You will eat what I eat, you will keep my place when I am gone, you will be bravest of all. Though you may be few, even if many and many people come against you, you will kill them all.'".

Thus, according to Stanley N. Smith in the National Motorist, was the tribe of Indians called the Modocs created by the Great White Spirit known by them under the name of Kumush. From time immemorial this tribe had lived and hunted and fished in that section of Oregon through which the Lost River makes its way to Tule Lake.

Fertile Land.

The land was fertile and rich and it was well filled with game of all kinds. The hills and woods and the mountain meadows provided amply the seeds which the Indian women sought and ground into the paste which served the tribe for bread.

Their neighbors were the Pitt River Indians toward the south and Piutes to the east. To the north lived the Klamath Indians, bitterest foes of the Modoc and most despised by them. To the west were the Shastas, who derived their name from, or gave theirs to, the great mountain that overlooks the Shasta country.

Modocs Bravest.

And as had been decreed by Ku-

ALAMEDA, CAL. TIMES-STAR
OCTOBER 27, 1923

INDIAN LORE NARRATED BY CALIFORNIA INDIANS AT RECENT ALAMEDA MEETING

How Light Came—Why Crow Is Black and the Woodpecker Has White Eyes—Why Sucker Is All Bones and Eel Has No Bones at All.

At the First Presbyterian church, Wednesday night, when Dr. George Wharton James spoke on behalf of the California Indians, his lecture was illustrated by a delegation of redmen, several of whom made brief addresses or sang redmen's songs. From these recitals, spoken earnestly, with no sign of special dramatic effort, but evidently bearing the impress of truth, the TIMES-STAR representative gleaned facts and fiction of general interest. We produce the main ideas herewith as assimilated by the hearer, without special regard to minute details.

WHEN LIGHT CAME

Ages ago when the world was young and semi-darkness prevailed on the face of the globe, a California Indian on a hunt far to the eastward, discerned a ray of light. He reported back to his tribe and it was decided to gain this light, or a piece of it, if possible. There were no birds in those days. The birds came later and were named for the various Indians who were the original inhabitants. The first hummingbird was not a bird, but a fleet-footed Indian—the fastest-footed of the tribe. So Hummingbird was dispatched to the eastward to get the light, or a piece of it. Hummingbird traveled for ages and ages. He finally reached the light, but he lacked the power to bring back the light. So he came home.

Then a warrior party was organized and they went to the eastward for many moons. Finally they reached the light, put a chunk of it in a sack, and started homeward. Weary with the burden of carrying the sack, the bearers would frequently dump it violently on the ground, and bits of the light would escape, thus lighting the way from east to west. Finally the light was brought home. Then came the problem of hanging the light in the sky so it would shine out over the face of the forest, valleys and waters. Eagle, among the swiftest and most powerful, essayed to hang the light in the sky. He flew for ages and ages, but failed. One after another the most fleet and most powerful in the tribe tried to place the light high in the heavens. To Woodpecker was assigned the duty of watching the flight and keeping track of the distance covered. But all selected competitors failed to establish the light on high.

COUNCIL OF WAR

A council of war was called. One wise man said: "They have all failed. We all know that Crow is a mischievous, worthless rascal; but he is keen and bright. Let's try him." So Crow was given the light and he flew away with it. And he flew and flew, for ages and ages, and finally he anchored the light in the sky. But he carried the light so long that he was singed from its heat, and Woodpecker had gazed at the light so long in keeping track of the fliers that the Woodpecker's eyes were ringed with white. This is way the Crow's body is black and the Woodpecker has a film of white about the eyes.

DREAMS, NOT VISIONS

California Indians do not have visions, but dreams. They dream like a poet writes poetry. It is from their dreams that Indian poetry is written. An Indian appeared at a trader's store one day and said: "I dreamed you gave me a sack of flour." The trader said: "That's all right; take the flour." The next day the Indian appeared and said: "I dreamed that you gave me that gun and some ammunition." The trader said: "Help yourself." The third day the Indian appeared and said: "I dreamed that you gave me that side of bacon and a blanket," and the trader said, "Take 'em along." On the fourth day the trader went to the Indians and said: "I dreamed that you gave me all your lands and the horses in your possession," and the Indian said: "Here they are," and the Indian became an outcast in the state of California.

COYOTE SMARTEST OF ALL

The coyote, commonly reputed among white men as the most cowardly and secretly vicious among California animals, is credited by the Indians with being the brightest and shrewdest of all animal kind.

"LORD, I'M COMING"

An effective incident of the meeting was when one of the Indians sang in Indian words an old Presbyterian tune, "Lord, I'm Coming." He followed the Indian rendition with a stanza in English, the entire audience joining in and singing with surprised vigor and enthusiasm.

SIMPLE, SHORT, APPEALING

One of the Indians said: "I am growing old and my hair is getting gray. I have no place to go, nothing to eat, no place to sleep. My people gave away the lands they once owned and we have nothing left. The acorns are gone, the berries are gone; we cannot hunt, and we cannot fish.

"I do not plead for myself. I will get along somehow; but my folks are old, and I am asking you to help my folks and the other old people of my tribe."

INDIAN AND WHITE MAN

The difference between the Indian and white man has been defined by a clever mind as follows:

"The white man doesn't want much fun, doesn't want much to eat, doesn't want much sleep. The Indian never gets enough fun, never gets enough to eat, never gets enough sleep."

WHY SUCKER IS BONY

Long ago when Sucker and Eel were Indians, and not fish, they were prone to gamble. According to the narrative they were probably the originators of stripped poker. One day Sucker and Eel were having a little gambling seance and luck ran strongly against Eel. One after another he lost his possessions to Sucker. Finally he commenced betting his bones. The game continued until Sucker had won all the bones in Eel's body. This is why the sucker of today is so bony, and the eel has no bones at all.



In the Story Book Days Wh

AS AN answer to this question there is now being published the "Every Child Should Know Library." This is no hastily thrown together collection intended for a popular subscription sale. It is a comprehensive anthology of the best of all literature, and a guide for young people to the wonders of Nature that should be in every home.

¶ It has been an enormous task, calling for the perusal of thousands of volumes and the exercise of mature literary judgment. The old and the new have been put under tribute, the classic creations of Homer, the delightful imaginative stories of Hawthorne, the charming tales of Kingsley, the familiar fairy stories of Grimm, the fascinating Arabian Nights, with the poems and songs that should be committed to memory and the wonders of Nature that should be a part of every child's life.

¶ Children cannot be left to select their own reading. The important thing is to put in their hands books that will attract and interest them. They should store up an untold wealth of heroic sentiment; they should acquire the habit of carrying a literary quality in their conversation; they should know and wish to emulate the heroes of the world; they should carry a heart full of the fresh and delightful associations and memories connected with poetry hours to brighten mature years; they should develop their memories while they have memories to develop.

¶ The responsibility for putting forth a work of this kind is a great one and the publishers would consider themselves careless of their duty to the public if they had not been able to enlist in this enterprise editors upon whose judgment, literary taste and sober, earnest purpose they could confidently rely. They feel most fortunate in having secured just such editors.

¶ No literary man of the present time is more widely or more favorably known than Mr. Mabie, associate-editor of the *Outlook*. You need have no doubt as to his taste and ability. He has been deeply interested in this project and we are indebted to him for the volumes entitled, "Heroes," "Myths," "Legends," "Stories" and "Fairy Tales."

Sample Pages

to tell a tale in as short a form as it can be told. In this respect they are unlike the Ojibwas, who have a fondness for the long narrative; the more evenings it takes to finish the story, the better it is. The Ojibwa likes detail, is inclined to be digressive, and in temperament is more given to the display of fancy and emotion. In consequence the Ojibwa tale moves more slowly by reason of its garrulity; but it is of more value for the greater amount of information it reveals. It is perhaps possible to account for one reason of the Fox preference for the short narrative. When the weather begins to chill and the nights become raw, the fire of the lodge is then the centre of a circle of men and women, some sitting and others lounging, with the feet always towards the fire. By and by some one spins a tale; the next person tells another, and so round the circle go the stories one after another, and the last different from all that went before. They soon get under way, and hurry swiftly on with little or seldom any by-play, and come up at the end with a suddenness that is often startling. The result is a tale generally so elliptical that it would not be altogether clear to an outsider who was not familiar with its setting. And this habit of rapid narration tends to develop a traditional stereotyped style, of which the best examples in the text are the stories of the culture-hero playing the rôle of the guest and the host. Some parts of this collection are just the sort of tales that have passed round the fire circle, while others were related with varying degrees of formality and under different situations. In some instances the object was only for pure trifling merriment, and in others it was seriously meant to convey information and moral instruction.

For convenience and out of a sense of general relationship the matter is presented under six broad divisions. Part I indicates the character of the oral historical narra-

tive. Under Part II is grouped a number of stories that have no intimate relation with one another, but belong to the general body of myth and tradition. Part III includes various forms of the didactic story, in which a certain line of conduct is meant to be taught not so much by direct implication as by the inference suggested from a personal narration cited for an example; the didactic story is a form of parable. In Part IV are a number of stories, some of which are really didactic in character, but which are placed together under a general grouping of fasting, visions, and dreams. Part V embraces the stories connected with the culture-hero. And finally in Part VI are given a few examples of the short simple prayer.

The plan of the translation was to follow the order of ideas expressed in the original as far as the idiom would permit, consequently the text can to a great extent be followed word for word and sentence for sentence in the translation. The sentences and paragraphing correspond in both text and translation, likewise the punctuation with period, colon, and semicolon, but not always with comma and exclamation-point.

It is not an easy thing to convey the sense of Algonkin by means of an absolute literal rendering. Yet the translation here offered is in a way fairly close; in some instances it may be too free, while in as many others it may be so close as to obscure the full sense of the original. But nevertheless, whatever may be its imperfections, the translation is my own, and I alone am responsible.

The articulation of the consonants and the pronunciation of the vowels should offer little or no difficulty. A descriptive word or two with each letter will indicate the nature of its sound.

CONSONANTS.

ˀ A laryngeal catch, denoting short arrest.
° Softened glottal stop like that caught preceding a feeble whispered cough.
ʻ Denoting a whisper before the articulation of *k*, *t*, and *p*. It also occurs before *h*.
h An aspirate like *h* in *hall*.
ʻh An aspirate of the same origin as *h*, but preceded by a whisper.
hw A bilabial, aspirate glide.
k Like the inner k-sound in *caw*.
g A k-sound articulated in the same place as *k*, but with an acoustic effect of almost a medial sonant.
ʻk An outer k-sound like the one in *key*. The apostrophe is for a hiss of breath before complete closure.
c Like the voiceless *sh* in *she*.
s Differs from *s* in *sent* in that it is articulated with the tip of the tongue against the lower teeth.
tc Like *ch* in *chill*.
t A pure dental surd.
d A dental articulated in the same place as *t*, but with the impression of being almost voiced.
ʻt A dental differing from *t* only in the fact that an audible hiss is expelled just previous to the stop.
n Differs from English *n* in that it is articulated with the point of the tongue at the base of the upper teeth.
m Same as *m* in *me*.
p Like *p* in *put*.
b Differs from *p* only in its being nearly a sonant.
ʻp Like *p*, but with the difference of having a puff of breath expelled before closure.
y Like *y* in *you*.
w Like *w* in *war*.

The following is a tabular view of the consonants:

	Surd.	*Spirant.*	*Nasal.*
Glottal	ˀ °	ʻ	—
Post-palatal	k, g	—	—
Palatal	ʻk	—	—
Alveolar	—	c s	—
Dental	t, ʻt, d	tc, ts	n
Labial	p, ʻp, b	— h, w, y	m

VOWELS.

u Short like *u* in *full.*
ū Long like *u* in *yule.*
o Long like *o* in *hotel.*
ō Long like *o* in *rose.*
ʌ Like the short vowel sound in *sun.*
a Short like *a* in *what.*
ā Long like *a* in *alms.*
å Like the broad *a* in *law.*
ä Like *a* in *alley.*
e Like *e* in *let.*
ē Like the a-sound in *tale.*
i Like *i* in *sit.*
ī Long as in the vowel sound in *see.*

DIPHTHONGS.

ai Like the diphthong in *my.*
ʌi Like the diphthong in turn, with the *r* of the word slurred.
ei Like the diphthong in *day.*
åi Like the diphthong in *boy.*
au Like the diphthong in *shout.*
ou Like the diphthong in *foe.*

The normal quantity of the final vowel is short and weak, and for that reason it often occurs in a small superior letter. It is generally omitted where the following word begins with a vowel.

The matter of stress can be indicated only in a general way. As a rule, in words of two syllables the accent falls on the first; in words of three syllables, the accent falls on the antepenult; and in words of more than three syllables there is generally a principal stress on the first or second syllables and a falling secondary stress on the penult. In many instances stress is contrary to what is here stated, and in such cases it is generally indicated by the acute accent.

In conclusion it is fitting that I should express my gratitude to two men who have been my constant help in

the work of which this forms but a part: to my father, who made it possible for me to get into touch with this difficult material, for it was largely through him and for his sake that much of it was imparted to me; and to Professor Franz Boas, by whom sympathetic assistance was always given, and under whose direction the work was undertaken and brought to publication.

I. — HISTORICAL TALES.

1. Ä'kepuskawutc[i] Meckwa'kīhag[i].[1]

Manigu nāhinā ä'tcākō'kātīg[i] me'tusäneniwag[i]. Wätcitcākō'kātīg[i] Wâpasaiy[a] icisōtug ineniw[a] änänesātc[i] me'tosäneniwa'[i]. Wī·u·tcipōninesātc[i], "Kī·u·tūgimāmipen[a], Wâpasaiy[e]," ähi·o·wātc[i] me'tosäneniwag[i]. Ōnäkīcitcāganwātcīwātc[i] me'tosäneniwag[i] ä'kanōnetc[i] Wâpasaiy[a]: "Nīhutūgimāmipen[a] kīyaw[i]."

"Ha[u]," ähitc[i]. "Mämetcinä'[i] nīnawatcinesāwag[i] māhag[i] pyäyātcig[i] me'tosäneniwag[i]. Initcā'[i] wīwäpi·u·gimāwiyān[i]," ähitc[i] Wāpasaiy[a]. Inimeg ätaswipyānitcin[i] me'tosäneniwa'[i] kīweskānitci'[i], "Mämetcinä'[i] nīnawatcinesāwag[i] māhag[i]," ähitc[i]; "anemōhag[i] wīwīseniwag[i]." Inähitcāpe'[e]. Tcatcawī'[i] néguti, tcatcawī'[i] nīcw[i] ä·a·skwinesātc[i]; ä'kīckīckecäcwätcāpe'[e]; nā'käkīckigumäcwātcāpe'[e]; nā'käkīckīckene'käcwätcāpe'[e]. "Awasīmähitaswi kī'pyāpw[a]," ähinātcāpe'[e].

Inip[i] manīninā ämetegūci·i·[2]cama'tīha'[i] ä'pyänutāguwātc[i]. Ä'tcāgihāwātc[i]. Me'tenō'[i] nīcw[i], mecegä'[i] nesw[i] ä'pwāwinesātc[i]; ä'kīckīckecäcwātc[i]; ä'kīckigumäcwātc[i]; ä'kīckīckene'käcwātc[i]. "Âwasīmähitasw[i] kī'pyāpw[a]," ähinātc[i].

1 This narrative is told to account for the defeat of the Foxes by the allied peoples who came against them on account of the reckless conduct of one of their leading men, White-Robe by name. He violates the hospitality given to strangers by killing them. To restrain him from his violence an attempt is made to induce him to be chief, but without success. His conduct brings on an attack by the surrounding peoples, who are helped by the French. White-Robe is taken prisoner by the Peorias, who, when burning him at the stake, are told of the doom to come upon them.

2 äme'tegūci'[a] or wäme'tegūci'[a] or me'tegūci'[a], "French" or "Frenchman;" the word refers to something wooden.

I. — HISTORICAL TALES.

1. When the Red-Earths were besieged.[1]

Now this was the time when all the people were encompassed round about (by their enemies). The cause of their all being beset was due to a man whose name must have been White-Robe and who was continually slaying people. To the end that he might cease from the killing of them, "We would have you become our chief, White-Robe," the people said. It was after the people were all agreed that White-Robe was addressed: "We wish you for our chief."

"All right," he said. "Only let me kill just these people who now have come. And then truly will I begin being chief," said White-Robe. And then as many as would come of the people that were passing through the land, "Let me kil! just only these," he said; "that the dogs may eat." Thus always would he say. Sometimes one, sometimes two he saved from killing; from them would he cut off both ears; and he would cut off their noses; and he would cut off both their hands. "A few more of you should come," he would always say to them.

They say that about this time were they then visited by soldiers of the French.[2] They slew them all. Yet there were two, perhaps three whom he did not slay; he sliced off both their ears; he sliced off their noses; and he sliced off both their hands. "A few more of you should come," he said to them.

Nā'kōnä'pyänutāguwātc āwasitaswi, nā'ka kutAga'i Anenōtäwa'i tAgwi. Ä·ē·gimeg īni'i ä'tcāgihāwātci. Nā'ka me'tenō'i nīcwi, mecegä'i neswi ä'pwāwinesātci. Cäskä'kīckīckecäcwātci, nā'kä'kīckīckigumäcwātci, nā'kä'kickīckene'käcwātci. Nā'kä'penōhātc ähuwīgenitcici. "Āwasīmähitaswi kī'pyāpwa," ähinātci.

Kä'tenatcā īni wätcimāwitcāgō'kawutci Meckwa'kihAgi. InaskAtc äwäpipyānitci mānemeg äme'tegōcīha'i nākAnenōtäwa'i tcāgähinātowänitci. Kī'kä'pōninōtāgowātc uwītcīskwäha'i.

Nāhinā äwäpipyānitci nemecōmes ōgyän ähiskwäsähinitci. Ä·a·'tänigi me'tegwi ä'pepigwäyānig ä'tAcika'kinegutci. KwīyenAmeg uwītcīskwähwāwa'i ä'pemumyäminitci. Nīcugunitcā ähAnemipemāwAnetīniwa'i. Inā ähawitci nāne'kAnikī'kwi nāne'kAnitepi'kwi nā'ka. Nāne'kAnikīcekwi nāne'kAnitepe'kwi ä'pemwäwäcinitci. Ä'kwāwAnetīnitci, ōni pe'kutänig ōsAn ä'pyänutāgutc īna'i. InatAc ähutcipemāmuwātci.

Inip ä'tAcōtäwenigäwātci Meckwa'kīhAg ähawitci neguti neniwa änepäwäwä'kahwātc änAgAmutci nā'k a'ku'kūn ähAnwäwähwātci. KīgänōwAgipi Meckwa'kīhAgi. Īni mAmīcīhAgi, "Penäsiwaiya[2] nepīg iciwene'ku. Nyäwenwi kīpasisahāpwa," ähinetci. Ininähiyätuge nämepyägi pemisahāwātci pasisahāwātci, äwäpime'pugi. A'penätc īna.neniwa ähanwäwähigätc ämAnetō'käsutci wīnepäwäwä'kahwätci. Uwītcīskwäwa'i ä'kī'tcāginepānitci wäpinuwāmuwātci me'tu-

[1] Meckwa'kīhAgi, "Red-Earths;" the tribal name the Foxes call themselves from the belief that their ancestors were created from red earth by the manitou.

And accordingly there came against them a still greater number, and with them also were other Indians. Even all of them he (and his men) also slew. Once again only two, perhaps three he did not kill. What he simply did to them was to slice off both their ears, and to slice off their noses, and to slice off both their hands. And then he sent them back on their homeward way. "A few more of you should come," he said to them.

Verily that was the reason why the Red-Earths[1] were assailed and encompassed about by all (the nations). And then after awhile there began to appear ever so many French and the Indians of every language. Round about on every hand were they beset by the camps of the foes.

At the time when they began to come, the mother of my grandfather was then a little girl. There was a log that was hollow and there she was hidden. Along by that very place did their enemies make a road; and for the period of two days were they continuously passing over. There she remained both by day and by night. Continuously by day and continuously by night sounded the tramp of them passing over. After they had made an end of their passing over, then at night by her father was she visited there. It was from that place that they took their flight.

They say that in the camp of the Red-Earths was a man who put the foe to sleep by the singing of songs and by the beating upon a drum. They say that the Red-Earths were celebrating a feast (of the clans). And so the attendants, "Take the skin of a small animal[2] to the water. Four times shall you dip and skim it beneath the surface," they were told. Then was the time it must have happened that as under the water they dipped and

[2] Penäsiwaiya, an uncommon term referring to the skin of a small animal that is kept in one of the big sacred bundles of the clan. Penäsi is *bird* in Ojibwa.

säneniwAg[i]. Nenyäskwähinämowätc[i]. Negutwaiyag a'kwitä'kīg änagämuwätc[i] wä'kahigan ähacitöwätc[i]. Ï'na ätacimatanetc[i].

Öni pacitöhag[i], "Käta nüwī'käg[u]", ähinäwätc uskinawäha'[i]. Pacitöhagäpe'[e] nwäwī'tägäwätcinäpe'[e], äyäne'kī·ä·pe ai'yäpam ä'pyäwätcin[i]. Kä'geyä'[i] pacitöhag ä'tcägihetc[i]. Önitcä uskinawähag änüwinüwī'tägäwätc[i], äyäne'kīmegäpe aiyäpam ä'pyäwätcin[i]. Kägeyä'[i] nä'k uskinawähag ä'tcägihetc[i].

Nä'ka negutwaiyag ähaneminämuwätc[i]. Inipi neguti äwīsagicig[i], u'käteg ä'pä'tätcig[i], ön a'te'tcikanawähinütätc[i]. Askatc ä'pyänemetc[i] kīgänäwa'[i] mäcenemetc'[i]. Negutikwäw[a] ämaiyötc äwäwītä'tc īnin[i] neniwan[i]: "A'kinämasutä'[a] necisä'[a] näsäte'[e], mani kīwīte'kä'[a]!" ähitc[i].

Ineniw[a] ä·ä·'kwätc[i] pä'k[i]. Käski me'tegw[i] ähutä'kwatumitc[i]. Ke'tcin[e] pyäyänitc[i] neguti neniwan ä'kätcisahänitc ucemisan[i]. "Ina kecisä A'kinämasutä'[a]! Ina pyätcīgwäcig[a]!"[1] ähinetc[i].

"'A'kinämasutä'[a]' netegöp[i], aiyö ähawiyän[i]". ähitc[i]. Inin[i] kätcisahänitcin ucemisan[i] mene't anigä'pagisahwätc[i]. Mäne-

[1] Said in mockery.

skimmed it along, then it began to snow. All the while the man kept beating upon his drum, conjuring for power to put them to sleep. After the enemy had all gone to sleep then the people began to go forth from their camps and to flee. They went fleeing in every direction. One group fled to a hill where they made a halt and set up a stockade fort. There they were overtaken.

Whereupon the old men, "Do not go forth," they said to the youths. Then the old men continually went out to fight, and fewer grew their number every time they came back home. In the end all the old men were slain. Thereupon the youths continually went out and advanced to the attack, fewer they kept getting every time that they returned. And at last all the youths were slain.

And there was one group that kept straight forward on its course of flight. They say that it was then that a certain man fell and hurt himself, in the foot he was snagged, and some distance off the road he crawled. In a little while hither were being fetched the captives that had been taken. One woman that was weeping mentioned the man by name: "O that only He-who-makes-the-Earth-rise-at-his-Call my uncle were yet alive, not would I be travelling about in this wise!" she said.

The man then grew highly angered. Yet only a club he had for a weapon. As near by they were coming one of the men (of the enemy) gave his niece a push (to make her quicken her pace). "There is your uncle, He-who-makes-the-Earth-rise-at-his-Call! There he is peeping at us from the place where he lies!"[1] said he (speaking of her uncle).

"He-who-makes-the-Earth-rise-at-his-Call is the name I am called, and here I am!" he said. He who had pushed

meg änesātc[i] neci'k[a], tcāgimegu kutAga'[i] ä'pemāmunitc[i]. Inähutcikīwäwenātc[i] mäcenemetcin[i]. Myäwänāgatamowātc[i] pemecihwāwātc uwītcime'tosänenihema'[i].

Ōni nā'ka Wāpasaiy[a] kīcāgwänemutc ämīgātītc[i]. "Mecenenagutc[e]," ähinātc uwī'kāna'[i]. Äpapōkuskahwātc ume'tähAn[i]. Ōn uwī'kāna'[i], "Kāta!" ähigutc[i].

"Kūwi, Kīmecenekōpenameg[u]," ähinātc[i]. Ä'papōkuskamawātc uwī'kāna'[i] ume'tähwāwa'[i].

Inip īninā ämecenetc[i]. Kīcimecenetc[i], MäskōtäwAn[i] [1] mäcenegutcin[i]. "Wä'nä'[a] nä'sāt[a] netōgimāmenānAn[i]?" Ä'hinitc[i] Wāpasaiy[a].

"Kacinā'[i], mAnatcā nī'kān[a]. Me'tōtc Anemōhähan inwäwätepähwäw[a]," ähitc[i] Wāpasaiy[a].

Ōnäkegyäna'pinetc[i] Wāpasaiy[a]. "Kewīcāpen[e], Wāpasaiy[e]?" ähinetc[i].

"o'Än[e]", ä'hitc[i].

Ugaskamanyäwan ä'pa'kwäcamahwutc[i], ōnähapōnetc[i]. Kīcesamawutc[i], "Wīsenin[u], Wāpasaiy[e]," ähinetc[i]. Kīcacametc[i], "Kewīcāpen[e], Wāpasaiy[e]?" ähinetc[i].

"o'Än[e]," ä'hitc[i].

Nā'k unānan ä'pa'kwäcamawutc[i] ä·a·pōnetc[i]. Kīcesamawutc[i], "Wīsenin[u], Wāpasaiy[e]," ähinetc[i]. Äwiyāsīwitcinimeg ähanemipa'kwäcutc ä·a·pōnetc[i]. Utūwīyāsem ämītcitc[i]. Kīcit-

[1] Mäskōtäw[a], "fire person" or "prairie person;" from mackotäw[i], "fire" or "prai-

Classification

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NOTES AND QUERIES

ADDITIONAL CATCH-WORDS. — In a previous compilation of mythological catch-words "already suggested," [1] I confined my attention almost exclusively to those intended to designate North American motives. In the following list I include a number of terms used by Mr. Joseph Jacobs,[2] Miss M. R. Cox,[3] and Andrew Lang,[4] translations or equivalents of designations employed by Frobenius [5] and Stucken,[6] and several new catch-words proposed by the writer.

Jacobs

Advice disobeyed.
Confused identity.
Grateful animals.
Magic bean-stalk. Applicable to any magically rising resting-place transporting the hero to an upper world.
Resuscitation.
Thyestian dish. A character is served with the flesh of his relatives.
Feefofum (Frobenius's Menschenwitterung). The ogre scents the presence of a human being.

Cox

False or substituted bride.
Revivified bones.
Villain Nemesis.
Menial hero, or heroine.
Counter-tasks. The tester is himself subjected to trials.
Eating-taboo.

Lang

Nuptial taboo. The hero is enjoined from intercourse with his wife for a limited period of time.
Skin-shifter. The hero, by donning and doffing an animal skin, assumes and discards the character of the animal.

Frobenius

All-devourer (All-Verschlingen). The monster has swallowed *all* the people. They are subsequently rescued by the hero.
Hydra (Drachenköpfe).
Tell-tale hand-mark (Handabdruck). A clandestine lover is identified by the mark made on his robe or skin by his mistress's hands.
Arion. The hero is borne home on a water-animal's back.
Land-angler (Landangelmythen). The hero (Maui), throwing out his fish-hook, captures a whale, from which the earth develops.

[1] "Catch-Words for Mythological Motives," *Journal of American Folk-Lore*, 1908, vol. xxi, pp. 24–27.
[2] The International Folk-Lore Congress, 1891, "Papers and Transactions," London, 1892, pp. 87–98.
[3] Marion Roalfe Cox, "Cinderella," London, 1893.
[4] Introduction to "The Most Pleasant and Delectable Tale of the Marriage of Cupid and Psyche," London, 1887.
[5] Leo Frobenius, "Das Zeitalter des Sonnengottes," Berlin, 1904.
[6] Ed. Stucken, "Astralmythen," Leipzig, 1896–1907.

it, and had always asked him to sing it for her on his visits to his old home.

Living a mile or so outside of Tatamagouche is an old man of French-Swiss descent, Robert Langille, who has been a ballad-singer all his life. Last summer, though he was eighty-six years old, he still sang with unabated energy, and remembered perfectly many of the old songs which had been current in his neighborhood when he was a boy, and which he had had special opportunities of learning, since he was one of the old race of cobblers who went from house to house to do their work. He has taken no active part in the life of the community, and has lived now for years in a quiet spot outside the village with his two sisters. To these three old people ballad-singing is still a live form of entertainment, and "Old Bob" has always had the most appreciative kind of audience in his own household. Here, then, living within two miles of each other, we have two types that are specially interesting in the present history of the ballad, — the singer who has outgrown the ballad, and the singer to whom the old songs are forever young.

But the broadsides, where are they? I have asked this question so often that it looks back at me now from the sheet like an old friend. Mr. Henderson must again adorn my tale. In his home there was an unusual collection of broadsides, but to-day he cannot account for one of them, nor does he regret the fact. Indeed, why should he? I have said that these broadsides were greatly prized by the Henderson family, but that was in the days when it meant something to know more ballads than your neighbor. The housemaids were finding a real and practical use for the Percy Manuscript when it was taken from them, and the old ballad-sheets were in at least as convenient a form for household use as the Percy Manuscript.

CAMBRIDGE, MASS.

Polycrates. A fish swallows a ring or gem which is ultimately recovered.

World-parents (Welteltern). Earth and sky, the parents of the world, are originally joined as mates; they are separated.

Sham doctor (Trugheilung). The hero, in the guise of a physician, kills the injured enemy.

Old-woman ally (Hilfsalte).

Hot-rock missile (Glutstein). The monster is killed with a heated rock.

Eye-opening injunction (Augenöffnungsverbot).

Stucken

Pandora's casket.

Lemnos. All the women live segregated from the men (Blackfoot).

Newly proposed

Star-husband.

Trickster's handicap. The trickster who has obtained food by his cunning, stakes it on his winning a race against an apparently inferior opponent (*Hare and Tortoise* type). In order to equalize the chances, he weights one of his legs and loses the race.

Guardian buttocks.

Lecherous father. Coyote and his daughters.

Disguised flayer. The flayer disguises himself in his victim's skin.

Piqued buffalo-wife. A buffalo-cow married by an Indian is offended by his (or her rival's) actions, and departs with her child for the buffalo-camp, where the pursuing husband is subjected to tests.

In a recent contribution to the Journal, Professor Kroeber comments on several of the catch-words suggested by the writer.[1] I gladly acknowledge the justice of his criticisms, with, however, two exceptions. A catch-word *must* be brief, it *ought* to be self-explanatory; and it is desirable that motives varying from the norm, but obviously related in essence, be designated by a relatively slight modification of the *terminus technicus*. *Old Man of the Sea* is long, and requires reference to Sinbad for perfect clearness, which would render the phrase altogether too cumbersome. *Burr-woman* is not only short and unequivocal, but admits of a change to *Burr-man* or *Burr-rock*. As for *Invisible missile*, I admit that the term is not wholly unambiguous, but believe its brevity adequately compensates for the deficiency, in view of the fact that the "much more common shamanistic belief" referred to by Professor Kroeber is not so common as the crucial point on which a story of comparative interest hinges.

Robert H. Lowie.

NEW YORK CITY.

A TEWA SUN MYTH. — The following myth was given me by Clara True, white teacher at Santa Clara pueblo, N. Mex., and was obtained by her from José de Jesus Narangho, and again from Francesco Narangho.[2]

Montezuma, the Sue-Boy, had for his mother a poor and despised Indian girl. Every fall the people of the pueblo went to the mountains to gather

[1] "Catch-Words in American Mythology," *Journal of American Folk-Lore*, 1908, vol. xxi, pp. 222–227.

[2] Afterwards governor of the pueblo.

HOW THE COYOTES DANCED WITH THE STARS—A KAROK LEGEND

Recorded by George Wharton James

(How do you think the Indians account for the falling stars, and also for the bursting of a meteor with its particles or sparks falling from it in different directions? Read the following Karok story and you will see how they explain these phenomena.—Editor.)

As is well known, for some reason the great God-man of the Karoks, Kareya, gave the coyote great craft and cunning. All the aboriginal people of California, and the Southwest in general, have this same idea. The coyote is the typical animal of smartness, cunning and guile without too much honor or superior character. In the early days, when the coyotes first began to discover that they were smarter than the other animals, they became quite ambitious to show off, and to do things that were beyond the powers of the rest of the animal kingdom. It made no difference that their ambitions were beyond their own powers. Such was their unbounded conceit that they asserted they could do anything they wished. And it really seemed as if they believed in their own egotistical pretensions. For one night, as the animals were looking up in the heavens and watching the dancing of the stars, one of the coyotes braggingly said: "You think the stars are away above us and that no one can dance with them, but you are mistaken. I can dance with them any time I like." So the next night he climbed alone to the top of a mountain and asked one of the stars to reach down and take him by the paw, and let him dance at least once around the sky. The star only laughed at him and winked his eye slyly so that the coyote didn't know whether he was being made fun of or not. The next night he climbed to the mountain top again, and as he longingly waited the star came swiftly sailing along, took him by the paw and flew away with him through the sky. But the coyote had no idea it would take him so long to go once around the sky and he grew very tired and wanted the star to take him back to the mountain top. The star, however, paid no attention to him, but went on and on, until at last the utterly wearied coyote, looking down to the earth and thinking it was near-by, let go of the star and jumped. And then—what a scared coyote he was. Down, down, down he fell, and he seemed to get no further down. One night passed by as he fell, and another, and another, until ten sleeps (or nights) had gone, and then when he did finally strike the earth he was smashed and flattened out like a pancake. And that was the end of him.

You would have thought this awful end would have served as a frightful example to the other bragging coyotes; but it didn't. Another one went up to the top of the mountain and tried to persuade another star to let him dance once with him around the sky. This star was a kind star, and did his best to persuade the coyote not to try so dangerous an experiment, as the sky was not made as a playground for coyotes. But the silly coyote would not listen. He pleaded and pleaded by barking and yelping and howling each night as he squatted on the mountain top until the star grew tired of the horrid racket and, grabbing the coyote by the paw, went off sailing into space with the scared animal hanging on for dear life. But you must not think for one moment that the coyote had an easy time of it. Before he got over being scared he was compelled by the star to dance and dance and keep on dancing. At first it was all right. Then the coyote grew tired. But the star kept right on dancing and the coyote was compelled to keep on also. Then he begged the star to stop a little while, to let him rest, but the star said, "No! I can't stop, nor can you, for Kareya made me to keep on moving all the time, and as you would come with me you must keep on moving too."

So, on they went, on and on, until the coyote got mad and tried to climb on the back of the star so that he could ride, but the star was too small. So he was compelled to keep on dancing all the time, held dangling from the star by one paw, until his body began to go to pieces; first one leg, then another, then his disengaged paw, his body and his head, broke loose and fell, and all that was finally left of him was the one paw by which the star held on to him. Thus this conceited and silly coyote came to his end.

RED MEN ARE DYING

By Max Stern

Sacramento, March 28.—Indians of Northern California are making a last desperate stand for existence and are suffering hardships that slowly but surely are exterminating them.

So says a report issued by the California Board of Health through Dr. Allen E. Gillihan and Alma B. Shaffer, public health nurse.

Driven to barren wastes where farming is impossible, deprived of schooling, neglected so that disease has wiped out whole tribes, made to live on acorns and nuts, and in some mountain counties, on roots and berries, California Indians, at one time the most numerous of any state in the Union, today are reduced to a scant 17,000.

The extermination of the red man in California is laid at the door of the whites. It was accelerated first in 1834 when the missions were confiscated, and next in the gold rush days of the fifties. Between 1834 and 1856 more than 200,000 Indians died, an average of 9,000 per year.

The chief cause of the dying off of the Indians is seen in the greed of white settlers who have pushed the families from the fertile and watered plains into rocky recesses of mountains. Dr. Gillihan found several Indian allotments on the barren top of Bidwell peak, 8,000 feet high, others on lava beds, marshes and alkali lands utterly useless for production of food.—Los Angeles Record, March 28, 1924.

Journ. Amer. Folk-Lore, Vol. XXI, Oct-Dec 1908

WAPPO MYTHS.[1]

BY HENRIETTE ROTHSCHILD KROEBER.

TWO BROTHERS.

THE old Coyote lived at Loknoma (Middletown), and with him lived the Chicken-Hawks. The Chicken-Hawks were hunters of all kind of game, — deer, rabbits, and so on. They hunted in the daytime and came home to eat what they had killed during the day. After eating, they went to sleep in the sweat-house, and in the morning, after having slept and sweated, repeated their hunt for game.

The Hawk stayed in the sweat-house, he being Capitan, and having no need for hunting, as the others supplied him. He had two little boys, who were with him playing with the arrows he was making. Not satisfied with these, he made a wheel or hoop for them to roll around in the sweat-house. They were rough at playing, and broke the hoop. This caused them to cry, for they wished to continue playing, and told their father so.

The old Capitan made another hoop, but strengthened it by putting on beads. Again the boys played, and again broke the hoop. Dissatisfied, they commenced annoying their father, and would not let him work at his arrows, but broke them and pulled off the feathers, never ceasing their crying.

The Hawk then made another hoop and strengthened it by putting a stronger belt (elima) around it. The boys played and were quiet, and the Hawk paid no attention to them and so lost them.

The hoop rolled out of the sweat-house, and the boys followed on and on. They laughed as they ran after the hoop, that was always a little ahead of them. They were unable to overtake it. While running they sang, "Nachilyi itutewelil hashi" ("Hoop, come back! Hoop come back!"). But the hoop went faster and faster on its way south, and the boys just continued following until late in the evening, when the hoop turned, and, itself tired, dropped down before the boys.

The younger boy was crying, and asked his brother where was their mother.

When the Hawk looked up from his work, he missed the children, and knew they were lost.

The boys slept where they stopped, on the ground, without shelter or blanket. When they awoke, they rose and gathered acorns. They cooked and ate them. Looking about, they saw a little lake. Many ducks were on the lake. The boys made a snare for the ducks. They caught some and brought them to the camp and cooked them, and the

[1] Contributed as part of the Proceedings of the California Branch of the American Folk-Lore Society.

elder brother fed the younger. Then he set more snares and caught more ducks.

Then he said, "If this house we made does n't stand over night, we'll die in the morning." In the morning the house stood, and they continued living on the ducks they trapped.

After sundown the little boy said, "How are we going to grow big by night?" The elder said, "To-night we have acorn-bread, mush, and pinole." They grew big over night because they got and ate all the food they called for.

They were both grown, and both trapped ducks all day. The duck-feathers they used to make blankets.

They went to bed at night, but were awakened by the Screech-Owl's loud cry. The younger went to call it, saying, "Come here and eat some ducks!" The Owl came close when it was called. The boy said, "Hurry up and eat!" The Owl came and sat on the roof of the house.

The elder brother was lying in bed. The younger sat down on the other side of the fire. The Owl jumped down to the door, with eyes big and glaring. The younger brother saw the Owl, and became frightened. He asked his brother, "What is that?" He answered, "That is what you called. Why do you become frightened?"

Then the younger brother said to the Owl, "I called you to eat these ducks."

The Owl helped himself to the acorn-bread and passed it to the younger boy. The boy asked, "Have you any daughters?" The Owl answered, "Yes, I have two daughters." The boy said, "That, then, is right for us."

Daylight came, and the Owl wanted to go home. The younger boy sacked the ducks for the Owl to take with him. A little way from where the boys lived was the Owl's village. There the Owl went.

In the morning the people in the village asked the Owl many questions about the ducks, and where they came from. The Owl said, "I met two boys, who called me and gave me the ducks."

The Hawk started away from home, saying, "I am going to look for my boys." The Hawk's brother went with him. They went to the south to look for the boys. At night they came to where the boys lived.

The Hawk had another brother, who lived in the south, and the three brothers met the next morning. The brother of the south said to the other two, "You have been away a long time. Now you must come home with me. You need not return to your village." He then led his brothers and the Hawk's two boys to the village where he lived. He asked his brother, "What did you do to your two sons, and how did they come here?"

They all stayed in the village Melele (by the pond), and that's the last.

COYOTE AND THE FROG.

At Bulnoma, about two miles above Middletown, lived the old Coyote, with his grandchild the Hawk (nihle). The Hawk hunted and killed deer, but never gave any to his grandfather. They lived in different houses, the Coyote and his wife the Frog (gadek!), and the Hawk and his wife the Quail (bibi).

The old Coyote brought a deer-hide and antlers and put them on his wife, and disguised her as a deer.

The Hawk hunted all day and saw no deer. When he was returning home, he saw one, and tried to shoot it with his arrow; but the Deer kept moving towards the river, always keeping ahead of the Hawk. When the Deer reached the river, he was shot in the belly by the arrow sent by the Hawk. But the Deer got away. He jumped into the river.

This was Coyote's disguised wife. By jumping into the river she was able to throw off the hide and antlers and hop back to her house, where Coyote helped her into the room. She became sick. Coyote put medicine on the spot where she was shot.

The Hawk followed the blood trail left by the Deer. It got dark, so he went home. He told Coyote, "I shot a Deer near here, but it got dark and I could n't find it, so I came home."

The Frog was very sick during the night, and Coyote tried to help her. The Hawk had but one arrow, with a very long flint, and he always used it to kill deer. At midnight the Frog pulled out the flint from where she had been shot. When it fell to the ground, it sounded like silver.
The Hawk heard it, and called to the Coyote, "That sounded like my flint falling." The Coyote then began to cry, "He, he!" and said, "I did n't hear your flint; but I have one here, and it is my flint."

They got a basket, and Coyote filled it with hot water and washed the flint in it. In the morning the flint came out of the basket a man. He sat next to Coyote. Coyote said, "That's right, my boy."

In the morning the Hawk went through a little opening in Coyote's door. He saw a man sitting with Coyote. The Hawk said, "That looks like my brother. I will tell Coyote."

Coyote offered the flint man food, but he refused and just sat there. Coyote did n't know

what to do, so he went to Mishelewu and gathered sweet clover and took it home. Then he showed it to his flint son. He grasped it from Coyote and kissed him, and ate all that Coyote had gathered. On this clover the flint man lived. He ate nothing else.

The next day the Coyote and his frog wife went out and gathered a big lot of clover (<u>boti</u>) for him.

The Hawk never got his flint back. And that is all.

Am. Anthropologist, Vol. XI, no. 2. Feb. 1898.

BOOK REVIEWS

Modern Mythology. By Andrew Lang, M. A., LL.D. London and New York, 1897, Longmans, Green & Company.

This author and his work are too well known to need an introduction, but we see him in a new light and one so uncharacteristic of him that as we read these pages but for an occasional glimpse of familiar quotations and expressions we are apt to wonder if it is the same man.

"It may well be doubted," says Mr Lang in his introduction, "whether works of controversy serve any useful purpose. 'On an opponent,' as Mr Matthew Arnold said, 'one never does make any impression,' though one may hope that controversy sometimes illuminates a topic in the eyes of impartial readers. The pages which follow cannot but seem wandering and desultory, for they are a reply to a book, Mr Max Müller's 'Contributions to the Science of Mythology,' in which the attack is of a skirmishing character."

This latter clause the author makes use of as a justification for a veiled, yet apparent, personal attack upon his opponent in a "wandering and scattering" manner, totally unworthy of this eminent writer and at variance to his usual courteous and considerate treatment of the opinions of others.

He charges Mr Müller with unfairness in the presentation of his opinion that the philological is the proper method of studying mythology, based upon the "disease of language."

Mr Lang holds that the proper method is the anthropological, and, like the American school, considers the study of culture evolution and distribution by means of language as only one branch, and an inconclusive one at that, of the anthropological method, the substituting of only a part of the evidence for the whole.

He lays great stress upon the evidences of totemism, and gives the views of Frazer, MacLennan, Robertson-Smith, Sayce, Müller, and himself, showing great difference of opinion, and turning to American students for confirmation and for their material, a fact worthy of note, for European writers and scholars are beginning to learn the value of the work done in this country (see also "Beginnings of Art") and to see, after all, that

"that which the builders rejected has become the chief stone of the corner," for at last something good has come out of America.

The clearest exposition of the totem is that by Miss Alice C. Fletcher in a paper entitled "The Import of the Totem," read before the American Association for the Advancement of Science, August, 1897, in which she says: "The foundation of the Indian's faith in the efficacy of the totem rested upon his belief concerning nature and life. This belief was complex and involved two prominent ideas: first, that all things, animate and inanimate, were permeated by a common life, and, second, that this life could not be broken, but was continuous."

Briefly, then, totems in general terms were the symbolic representations of what the youth saw in his vision when he reached the age of puberty and passed through the ceremony connected with that event, and did not lie along the line of natural or blood relationship, nor was there any connection with ancestor worship. The association of those into societies or gens who had a common or associated form of totem as a social institution was the other purpose of the totem. In other words, it seems that in some degree, at least, the modern secret and fraternal organizations are a survival of totemism, which in some form has been world-wide in its distribution.

J. H. McCormick, M. D.

The Beginnings of Art. By Ernst Grosse, Ph. D. New York, 1897, D. Appleton & Company.

This is one of that excellent series edited by Prof. Frederick Starr, known as the Anthropological Series, of which "Woman's Share in Primitive Culture," by Mason, and "The Beginnings of Writing," by Hoffman, are prior publications, and illustrate in detail two phases of culture of which, among others, "The Beginnings of Art" treats: first, woman is the aboriginal decorator in the primitive fictile and technical arts, and, second, pictographs and glyphs, the foundation of writing, was an art in a dual sense.

The author does not claim for this pioneer in a new and wide field an exhaustive study, but simply to lay a foundation for wider research upon scientific lines, and to lay before the investigator some pertinent questions to the solution of which he should endeavor to direct his efforts. His treatment of the sub-

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THE VERIFICATION OF A TRADITION

FREDERICK WEBB HODGE

Like other Indian tribes, the natives of the pueblo of Acoma, in western central New Mexico, have a legend of their genesis and migration. In so far as the creation is concerned, the story of course is nothing short of the mythic, since the origin of any aggregation of kindred in the prescriptorial stage of culture must necessarily be accounted for in the same manner as the origin of any natural phenomenon of which they have no direct knowledge. It also has been found that the parts of these traditions which recount the movements of a people from place to place and note the adoption of other peoples as a part of their tribal organization, the oral record deals with actual fact and has been passed from generation to generation with such fidelity that the now archaic expressions of the ancients are still repeated each time the story is authoritatively told. So carefully, indeed, are such traditions and rituals uttered that the slightest error in their repetition sometimes brings to an end an entire ceremony.

The writer has devoted considerable attention to the verification, by comparison with known occurrences, of those parts of the lore of southwestern tribes that relate to the historic period of that section, and has found that such legends have been preserved so faithfully that they coincide fully with events known to have transpired as remotely as three centuries ago. Therefore when we hear from native lips a story of ancestral deeds, apparently unprofaned by Caucasian contact and without an undercurrent of the marvelous, its integrity may usually be relied on.

The story of the fate of Katzímo is a part of the Acoma migration tradition which takes that people back untold ages to the mystic Shípapu whence every Indian came and whither his shade must some day return. The earlier part of the story is therefore largely mythic, for it deals with a time whereof the memory of man runneth not to the contrary. Then the successive occupancy and abandonment of one locality after another is told in elaborate detail until the present valley was reached and the lofty crest of Katzímo became the home of the ancients.

In this part of the legend there is nothing that savors of the mystic; it is a plain story of the probable, unaffected by the civilizing influences that have been hovering over their fortified home for more than three and a half centuries.

Katzímo was their abiding place, but how long ago no tongue can tell. We only know that the present Acoma was occupied when Coronado came, in 1540, with such an array of glittering splendor as this land had never before and has never since experienced. Five hundred, or just as likely a thousand, years may have passed since the falling away of a great rock mass that hitherto had given accessibility to the summit. Just such masses have fallen a thousand times since, some of them so recently that the elements have not had time to round their clean-cut edges.

The few inhabitants that remained in the village at the time of the catastrophe were cut off from their kindred in the fields below. In a short time their flesh became food for the ravens, and their bones remained to be bleached and powdered by a torrid sun and blown or washed away by wind or rain. Then the present Acoma was selected as a homesite, and there they lived when Coronado, and Espejo, and Oñate, and Vargas came, and there they live today—an honest, peace-loving, industrious community.

The legend of Katzímo was first noted and published[1] by Mr Charles F. Lummis, the well-known author, by whom it was communicated to Bandelier. In giving expression to his opinion Bandelier says: "Whatever may be true in this folk-tale about the rock of Katzim-a (as the Mesa Encantada is called by the Acomas), it is certain that its appearance and the amount of detritus accumulated around its base give some color to the legend."[2] It is not probable that Bandelier examined the talus closely or he would not have failed to observe the potsherds scattered over the summit. Knowing the mesa to be inaccessible by ordinary means, he doubtless viewed the cliff from the plain.

In 1895, accompanied by Mr James S. Judd, now of Middletown, Conn., I visited the pueblo of Acoma, where the Katzímo tradition was repeated to me. Proceeding to that interesting

1 St. Nicholas, 1890. Since this reference was made, Mr. Lummis has informed me that he first published the tradition in 1885.

2 Papers of the Archæological Institute of America, Am. ser., IV, Final Report, II, pp. 313-314, Cambridge, 1892.

cliff, I found little difficulty in making my way over the talus and up the great cleft near the southwestern corner to within about 60 feet of the summit, and while descending found traces of the hand and foot holes that must have formed a part of the original trail. The talus, I observed, contained numerous fragments of pottery, unquestionably of ancient ware. Some of the sherds gathered were decorated in a vitreous glaze, a method of ornamentation now unknown to any of the Pueblo potters. While it was found impossible to reach the crest of the mesa save by artificial means, I was satisfied that a sufficient body of evidence existed in the cleft and at the base to prove the verity of the Katzímo tradition.

In July last an attempt was made by a representative of a prominent educational institution (who evidently had no previous training in archeologic work) to determine the truth of the legend of the Enchanted Mesa. With the aid of a life-line fired from a Lyle gun, this explorer was drawn to the summit, where he spent part of an afternoon in an examination of the surface. Nothing was found to indicate that the crest had previously been inhabited or, indeed, even visited.

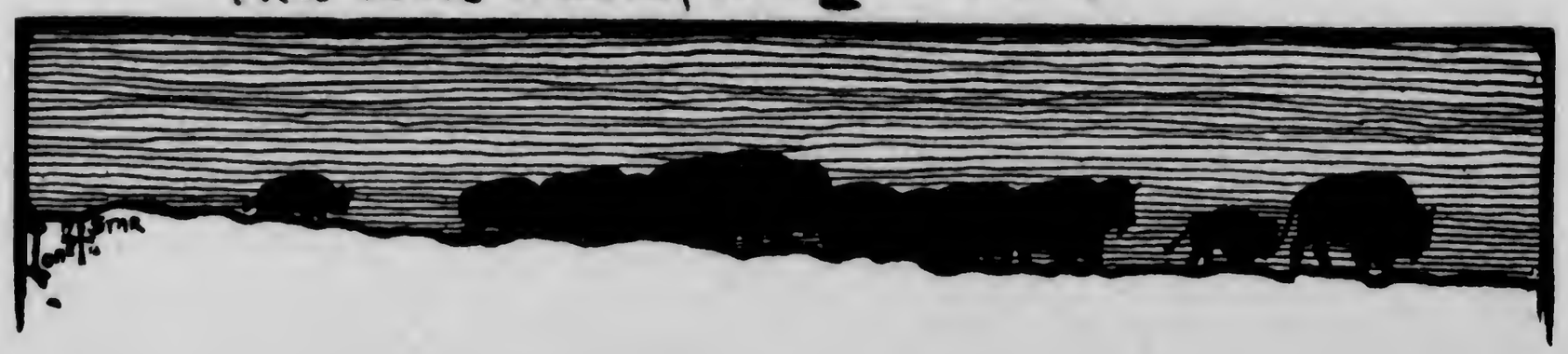
A few weeks after the expedition of the University explorer, having completed some archeologic work west of Acoma, I decided to make another visit to Katzímo and scale the cliff. Equipping myself with an extension ladder comprising six 6-foot sections, some 200 feet of rope, and a pole-pick, I procured the remainder of my outfit at Laguna, where I had the good fortune to enlist the services of Major George H. Pradt, of that place; Mr A. C. Vroman, of Pasadena, Cala.; Mr H. C. Hayt, of Chicago, and two Laguna Indians. The trip to Acoma was made on September 1st. The following day was spent at that pueblo in witnessing the Fiesta de San Estevan, and early in the morning of the 3d our party proceeded northeastward three miles across the valley to the Enchanted Mesa.

It is not necessary to enter into the details of the climb, which occupied a little more than two hours. Very little difficulty was experienced in reaching the summit by way of the cleft above mentioned, through which, according to the tradition, the trail formerly passed. The truth of the legend was fully borne out by the finding of a series of ancient holes pecked in the stone to receive the rungs of the rude trail-ladder.

After being on the summit a few moments a sherd of ancient pottery was found by Major Pradt, and during the succeeding twenty hours several more fragments of earthenware, two broken stone axes, a large flint arrowpoint, and a portion of a well-worn shell bracelet were also picked up on the surface. A rude stone monument, whose origin was undeterminable by the leader of the previous expedition, was readily found at the edge of the eastern cliff wall and proved beyond peradventure to be of artificial character. No foundation walls are now traceable, however; but since the more extensive talus heaps below are composed largely of earth, it is not improbable that the structures that formerly existed on the mesa were built of the "adobe balls" which formed the principal building material of the Rio Grande tribes when visited by Coronado in 1540. No water remains on the surface of the mesa save in a few eroded "pot-holes" in the sandstone; on the contrary, during each heavy rain, the water flows off in many cataracts, carrying much sand and stone with it. Only a few thin patches of soil now remain on the mesa top; much of it has been washed to the talus slopes during comparatively recent years, as the numerous dead trees on the bare rock floor now testify.

Altogether, there is abundant evidence that the Enchanted Mesa was inhabited at a remote period, and that the tradition to that effect is substantially true.

The Red Man, vol. 4:340, April 1912.



The Legend of the Tacquish.

AGNES V. WAITE, *Serrano.*



ARROWHEAD SPRINGS is the name given to a resort in the mountains just north of San Bernardino, in Southern California. It is named "Arrowhead" because of a peculiar rock formation on the mountain-side which when seen at a distance has the appearance of an arrowhead, the point of the arrow being downward and in the direction of these springs. The springs contain sluphur water, and many people visit the resort for the purpose of taking rheumatic and other cures.

A legend among the Indians of that vicinity connects these springs with legends of the "Tacquish," an evil spirit, which flies from this point to the San Jacinto mountain on the opposite side of the pass.

Its time of flight is determined according to the behavior of the people living in the vicinity of these springs. The Tacquish is said to assume the form of a large ball of fire, and when it passes across the gorge on its course, the people over whose heads it passes must shriek or holler in order that they may retain their hearts, which the Tacquish is seeking to destroy.

When children are naughty and disobedient, they are brought under subjugation by threats of the Tacquish, whom they learn to dread, just as the little white children do the bogies.



For instance, Raymond Buffalo Meat, a Cheyenne Indian and former student, writes from Omega, Okla., that he owns his own home and also a barn. "I have been trying to do what is right, and am a member of the First Cheyenne Baptist Church, where I am clerk and my father a deacon. Sometimes I interpret for the missionary. I will also inform you of my work. I have fifty acres of corn; it is pretty good; and ten acres of cotton; it is also good."

Elsie Valley, who is a laundress at Washunga, Okla., says: "I am certainly thankful for what Carlisle has done for me; it certainly has taught me how to earn my clothes and bread and butter." The ARROW holds up, as industrious boys, one who receives a reputation as a farmer because he captured the first prize at a county fair for cabbages, and another former student who earned over $130 in one month by car building, although only a short time out of the Carlisle carpenter shops. Another former student, Stephen Glori, is earning $29 a week in the mechanical department of a New York newspaper. Recently the success of Mrs. G. W. Pease, a former Carlisle student, in running a large ranch and caring for a family, has attracted a great deal of attention.

James B. Halftown, who attended Carlisle last year, recently wrote from his home in Tunesassa, N. Y., "I long to be at Carlisle with my old teammates at Lacrosse. I had bad luck this winter. Father and mother died, both inside of thirty days, and I have four little children to take care of. My grandmother stays with us to do the cooking, and I have to work. I am doing the best I can for them."



Am. Anthropologist
21: 2. April-June 1919.

BOOK REVIEWS

METHODS AND PRINCIPLES

The Mythology of All Races: vol. XII. *Egyptian*, W. MAX MÜLLER; *Indo-Chinese*, Sir JAMES GEORGE SCOTT. Marshall Jones Co., Boston 1918. xiv, 450 pp.

In this last text-volume of Dr. Gray's valuable series, Egyptian mythology occupies pp. 1–245 and Indo-Chinese the rest of the volume. In pp. 432–450, the editor furnishes a bibliography that on the Egyptian side makes no claim to completeness but contains all the necessary material. The bibliography of Indo-Chinese mythology is very short, but doubtless exhaustive.

It seems best to begin with a discussion of the latter part of the volume because little more can be said about it than a statement of its contents. Sir James Scott speaks of the peoples and religions of Indo-China, their myths and legends, their festivals and finally of the thirty-seven *Nats*, who, it seems, are only thirty-four. It is not pretended that the mythology of Burma and Tonkin is influential or important. On the contrary, the author points out frequently that the material of these stories is often derivative and the conceptions involved puerile. But he has put together a number of interesting facts, recondite because little known, and valuable for purposes of comparison. And he has furnished his account with nineteen large plates, most of them highly colored, which tell almost as much as any text could do of the nature and character of these curious spirits, called *Nats*. The colored plates are all taken from Temple, *Thirty-Seven Nats of Burma*, a book on which this account largely depends.

Much the more valuable portion of the volume is the brief examination of Egyptian mythology by Professor W. Max Müller. Professor Müller is one of the two most distinguished Egyptologists in America. He writes with the fullest and most direct acquaintance with the sources and presents the mature result of thorough research and long reflection on all phases of the life of ancient Egypt. It would be difficult to overrate his equipment or competence. And, in spite of its short compass, his presentation is one of the best that have ever been published.

As a matter of fact, it is much more than an account of Egyptian mythology. It is a highly significant and suggestive study of Egyptian

religion. That was inevitable from the nature of Egyptian mythology. Greek mythology, in the form we generally know, is largely the result of direct and often determinable poetic creation, quite irresponsible and only loosely associated with religious thinking and acts. Not so Egyptian myths. We know them largely from liturgies, and from the figures and cult-actions that they are meant to explain. That is, they form an integral part of Egyptian religious activity and cannot be dissociated from it.

In one other respect, the study of Egyptian mythology is a different thing from the Greek mythology, which is much better known and almost immediately comes to our minds first when the word mythology is mentioned. The Greek stories are concerned with persons who have a definite individuality even for us. That individuality is somewhat deceptive. It is due to an artificial selection on the part of later grammarians and mythographers who have suppressed contradictions and provided continuity and sequence where those elements were lacking. Closer study reveals a confusion of forms and functions that are usual in polytheism, but any examination of Greek mythology has the inestimable advantage of proceeding from a "textus receptus" to which it is possible to attach variants.

In the Egyptian myths, on the other hand, there is no such established basis of comparison. The functions of one god are assimilated with extraordinary readiness to those of another, in cult, or prayer or legend, so that, in most cases, it is in the highest degree difficult to establish definite lineaments for any one of them. It is only in the case of the Osirian cycle, very fully discussed in Chapters v and vi, (pp. 92–128), that we seem able to detach marked personalities from the mass of confused detail that is presented in most accounts, and, we may suspect, that this fact is due to causes similar to those that have given Greek myths their apparent cohesion.

This lack of definite personalities, this confusion of details and functions, was taken to be an indication of the essentially pantheistic nature of Egyptian religion. Many of the scholars who held this view were quite unconsciously animated by the century-old awe with which western Europe had regarded the mysterious divinities of the Nile. Especially when the Rosetta stone seemed to furnish the key to the long locked inscriptions, imaginative men were certain that the rending of the veil of Isis would disclose a new insight into the universe. Quite naturally they found what they expected to find. Even first-rate investigators were prone to attach a philosophic depth and universal meaning to the

stories they unrolled from the papyri and this fact, together with the tendency of men to over-estimate the value of the subject matter with which they habitually deal, gave a fundamentally wrong conception of Egyptian spiritual life.

Against this view, there was soon advanced the other one—which might be termed that of common-sense—that Egyptian myths were precisely what they seemed to be, that the stories were crude because the ideas which they expressed were crude, and that so far from representing a profound and philosophic pantheism, they were the natural expressions of a primitive animism ossified into something like a system by sacerdotal tradition. That was the position of Maspero and it is whole-heartedly urged by Professor Müller. The argument is clearly stated, and, to my mind, quite cogently.

But the book is in no sense argumentative or polemical. There is a deal of matter given, so much, in fact, that one of the important functions of the series, that of furnishing material for reference and comparison, is admirably preserved. This is done, not merely in words, but largely by the many illustrations from the monuments—a procedure practically unavoidable in any study of Egyptian mythology. There are further a few typical texts, and an alphabetical list of the gods outside of the Osirian cycle.

The author then deals in an authoritative way with the difficult theoretical questions involved in the worship of animals, in magic and in Egyptian conceptions of the future life. The last chapter discusses the development and propagation of the Egyptian religion.

More than sixty pages of notes, which themselves often contain additional material of high value, close Professor Müller's book.

The value of the book in contents and methods has been sufficiently indicated. It is for that reason unfortunate that certain mechanical defects make it hard to use. There is in the first place no index, not even the briefest one. This, for a book which offers so much, is a serious omission. No doubt, in a work of this nature, the preparation of a complete index was very difficult, but an indifferent or incomplete index is still much better than none at all. Further the notes are made difficult to consult for lack of the simplest of all devices, *viz.*, some indication at the top of the page of the chapter to which they belong or the page on which the annotated passage appears.

There are small points at which issue might be taken, less with Professor Müller's statements than with the unqualified form in which they are made. The official etymology of Sarapis may well have been

Osor-hap (p. 386, no. 19), but the balance of probability is still in favor of his Sinopean origin. Nor does it seem to me proper to say that the "Isiac mysteries" exercised less influence on the classical mind than did those of Cybele or Mithra (p. 121). It is easy to exaggerate the depth to which Mithraism penetrated ancient society, in spite of Renan's dictum. Isis, denationalized somewhat and syncretized into unrecognizability, but still retaining much of her Egyptian external attributes, was a real competitor of Christianity, as Professor Müller admits (p. 242). One might add to the references he gives the famous passage of Apuleius, Met. XIII, i–vi, and such Greek papyri as that of Oxyrhyncus (Ox. Pap. XI, 1380).

It is to be hoped that this short treatise is the forerunner of a fuller systematic account of Egyptian religion and mythology.

MAX RADIN

AMERICA

Kutenai Tales. FRANZ BOAS. Together with texts collected by ALEXANDER FRANCIS CHAMBERLAIN. Bureau of American Ethnology, Bulletin 59, Washington, 1918.

Like most of Professor Boas's work, this volume contains far more than it seems to at first sight. There are nearly three hundred pages of mythology given in both Kutenai and English. Part of this is in interlineated text plus accompanying free translation in English. The larger half of the collection is in solid text, with the translation at once literal enough to be of service to the linguist and sufficiently idiomatic in English to be readable and of ready use to the mythological student. The inconspicuous indication in the English translation of the lines of the Indian makes possible a very close correspondence between the two versions for those who are interested, without disconcerting the reader who cares only about the substance of the story.

Thirty pages of abstracts and comparative notes set a new example for work of this kind. It has long been customary to accompany collections of Indian tales by summaries. Very often however these summaries have been of undue length. Then, comparative references have usually been appended to the tales themselves, instead of the summaries. Dr. Boas's abstracts are unusually compact. They gain farther by having the several versions of the same myth brought together, instead of following the accidental order of their presentation. The comparative references are added as footnotes to the abstracts, where of course they properly belong. They are very full, perhaps vir-

APACHE FIRE STICKS

Major John G. Bourke quotes from an Apache myth: "The Coyote taught us to rub the Cedar [=Juniper] and Palmilla (Yucca) together to make fire."

Journal Am. Folk-Lore, Vol. 3, No. 10, p. 212, September 1890.

THE THEFT OF FIRE

Nearly two hundred years ago a Russian woman, Miss N. P. Dyrenkova, wrote of the important part that birds play in the cosmogonical legend of the Turki of Siberia, especially in the myth of the Theft of Fire.--Mentioned by Waldemar G. Bogoras in 1928 (as recorded about 1740).

[next final form

Beliefs concerning Witches, Pigmies, Giants, and other Fabulous Beings

How Witches Kill People

The Hookooeko of Nicasio and San Rafael say:

Our country is on the north side of San Francisco Bay and reaches from San Rafael to Tomales Bay. Before the white man came and destroyed us there used to be witches among the people. The people used to burn the dead. Sometimes after a burning the witches would save the ashes and burnt bones (called *me'-cham yem'-me-um*) and pound them up fine in a stone mortar and use them to kill with. The witches had two ways of killing people. One way was to put the powdered bones and ashes on the windward side of the house or rancheria of the person they wished to harm. Then the wind would blow the fine dust over the enemy. Next day he would have a headache and feel sick, and every day grow worse until by and by he died.

Another way was to take the hollow wing bone of a Turkey-buzzard and go to windward of the person to be injured. The witch then blew through the bone toward the person. The person soon had

bad dreams and felt lonesome, and next day went crazy, and after a while died.

With the right kind of a buzzard bone (called *to'-kah*), a witch could blow harm to a person from a distance as great as two miles.

Pigmies and Water People

The Hookooeko of Nicasio and Tomales Bay say:

Se'-kah the Little Folk dwell in thick places in the dark redwood forest, where no people live. They are very small. Sometimes they make people crazy.

Le'-wah ke'-lak the Water People live in the ocean, in a roundhouse under the water; sometimes they come up and show themselves.

The Devil of San Rafael

The Hookooeko of San Rafael say:

Yu'-ten me'-chah the Evil One lives in the hills just north of San Rafael; he travels about at night and sometimes comes and touches people when they are asleep, to frighten them.

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The Keahoweka of Tamales Bay + Nicasio Bay:

√Sumaps named Se'-kah dwell in redwood forest pools
folks crazy

√Lemam = salt water
Le-mah-ke'-lahk. Waterpeople. Live in ocean in a sandhouse under the
water + sometimes come up + show themselves.

√Wal'-la the Ghosts sometimes come back and dance in the redwood house: (folks) sometimes hear them
but never see them.

√Yu'-ten-me'-dam the Bad person or devil lives in hill just north of Sa-
Rafael. the sometimes comes at night touches sleeping people
to frighten them.

Beliefs concerning Ghosts and the Sign of Death

Ghosts follow the Pathway of the Wind

The Hookooeko of Nicasio and Tomales Bay say:

When a person dies his *Wal'-le*[24] or Ghost goes to *Hel'-wah* the West, crossing the great ocean to *Oo-tā-yo'-me*, the Village of the Dead. In making this long journey it follows *hinnan mooka*, the path of the Wind. Sometimes Ghosts come back and dance in the roundhouse; sometimes people hear them dancing inside but never see them.

Three Birds scream to frighten the Ghosts

The Southern Mewuk of the Chowchilla region say:

After a person dies his *Hoo'-ne* or Ghost sets out toward the ocean. On the way it has to cross a broad river on a log. While it is crossing on this log, three birds scream to frighten it—*Hek-ek'-ke* the Quail, *Ha-chah'-we* the Barn Owl, and *Hah'-jen-nah* a small Heron.

24 In this connection it is interesting to observe that in the language of the related *Olayome* of Putah Creek, Bats are called *Walie*; while the same word in the language of the Mewan Valley tribes means Ocean. The word for ocean among the Northern Mewuk is *Wallasu*; among the Middle or Tuolumne Mewuk, *Wallesmah*.

If the Ghost is frightened and falls into the river it turns into a fish; but if it keeps on and crosses the log it continues westerly over the ocean and goes to the place where all the Ghosts live together, and never comes back.

Ghosts may come back in Soo-koo'-me the Owl

The Middle Mewuk of Tuolumne River say:

When a person dies, *Oo'leus* the heart-spirit remains in the dead body for four days. During these four days everyone is quiet and the children are not allowed to run about or make a noise. On the morning of the fourth day the people sprinkle ashes on the ground over the buried basket of burnt bones – or over the grave if the corpse were buried instead of burned. On that day the heart spirit leaves the body in the invisible form of *Hinnan Soos* the Wind Spirit, or *Soo-les'-ko* the Ghost, and proceeds westward. That night it may come back in *Soo-koo'-me* the Owl, or in some other animal; so look out.

Some Ghosts are good, others bad. At last they all go to the ocean and cross over on a long pole to the Roundhouse of the dead, where they remain.

A Hole in the Nose saves turning into a Fish

The Southern Mewuk of the Mariposa region say:

If a person dies without a hole in his nose he

will turn into a fish, but if the nose is perforated for the *kun-no-wah* [25] he will not turn into a fish.

WHAT GOOD AND BAD GHOSTS TURN INTO

The Northern Mewuk say:

The heart-spirits or Ghosts (*Soo-lek'-ko*) of good Indians turn into *Too-koo'-le* the Great Horned Owl; those of bad Indians into *Et-tā'-le* the Barn Owl, *Yu'-kal-loo* the Meadowlark, *O'-lā'-choo* the Coyote, or *Choo'-moo-yah* the Gray Fox,[26] Whatever they turn into they continue to be forever – there is no change after that.

The night after the Ghost leaves the body it may come back and do harm to someone – so it is well to look out. [My informant told me that the night after his wife's Ghost left her body it came back while he was asleep and beat him severely.]

NOTE. The Tribes of Midoo stock also believe in transmigration. The *No-to'-koi-yo* or North-eastern Midoo say that their ghosts go into the Great Horned Owl, while the *Pā'-we-nan* or South-western Midoo say that when a person dies his spirit (*oos*) may go into any one of a number of things: it may turn into an Owl or Coyote, a Snake or a Lizard; it may become a Whirlwind, or it may

[25] The *kun-no-wah* is a short white rod of shell or stone worn in the nose by both men and women of this tribe.

[26] The Coyote and Fox are bad – they kill too much and make too much trouble; good Indians do not like them. *Yu'-kal-loo* the Meadow-lark is a bad bird; he is mean and is always saying disagreeable things.

go into the ground and become earth. Sometimes, but rarely, it goes off to a good place.

Ghosts hide in Stumps and Whirlwinds

The Northern Mewuk say:

Sometimes when passing *Too'-cha-mo* the stump you hear a noise inside; it is *Soo-lek'-ko* the Ghost. You had better go right on, for if you stop he might do you harm.

Whenever you see *Poo'-ki-yu* the Whirlwind whirling the dust around and around and carrying it up into the air you may know that *Soo-lek'-ko* the Ghost is inside, dancing and swinging round and round. You had better not go near it but keep away.

Ghosts hunt for a big Animal in the Ocean

The Mokalumne say:

After a person dies and is buried the heart-spirit comes out and shakes itself to shake off the earth, and then sails away in the air and disappears – going northwest to the ocean. This may happen on the fourth night, or at any time between the first and fourth.

The Ghost goes to the ocean and enters the water and finds a large animal [probably a whale] whose breast it immediately lays hold of and sucks. If it does not take the breast of this animal it can not live in the ocean with the other Ghosts, but in from two to four days returns and reënters the body from

which it came, and comes back to life again. It then tells the old people of the beautiful things it saw in the ocean – flowers and fishes and animals.

For a long time the people did not know where the *Ul'-le* or Ghosts went. After a while the Napa Indians told our people that they sometimes heard strange noises in the air overhead, usually in the evening or very early morning, sometimes at night, and more rarely in the daytime. The sounds were sometimes like singing, sometimes like crying, sometimes like calling or scolding – always high up. For a long time they did not know what these noises were, but finally some wise Indians found out that they were the Ghosts of people from the interior passing over on their way to the ocean.

One of our people was a 'Half Doctor'; he knew much medicine and was a good dancer. Once, when some one died, the 'Half Doctor' made up his mind that he would find out about the Ghost. So after dark he went to the place and hid close to the grave and watched. In the night he saw something like a person get up out of the ground and shake his head to shake the earth off, and then fly away quickly, disappearing at once. Nothing more was seen.

WAH-TIB'-SAH THE SIGN OF DEATH

The Northern Mewuk of the Mokelumne River foothills say:

When a person feels the inner side of the calf

of his leg twitch, as if some one were poking it with his finger, it is a sure sign that within three days somebody is going to die, and he must take care that he is not the one. The twitching is done by the person's totem or guardian spirit, who comes and pokes his leg to warn him of the danger.[27]

[My informant, the chief of a small rancheria, told me that he had been thus warned several times by *Mā'-wā* the Gray Squirrel, who was his totem, and that each time some one had died. He told me also that an old blind woman who lived in the rancheria, and whose totem was a Yellow-jacket wasp, had more than once saved his life by whispering to him just as he was going somewhere, that she had felt *Wah-tib'-sah* and he had better not go. Her totem friend, *Mel'-ling-i'-yah* the Yellow-jacket, had come and poked her leg to warn her that somebody must die. He had always heeded her warning and stayed at home and was still alive, while some one else, in a neighboring rancheria, had died.]

[27] For remarks on the prevalence and significance of totemism among the Mewan tribes, see my article entitled "Totemism in California," *American Anthropologist*, vol. x, 558-561.

1908

Hewitt file

ETHNOLOGY

What Hiawatha Was Made Of

Longfellow Created Hiawatha From Two Other Heroes And an Indian God, While Real Hiawatha Lay Forgotten

By EMILY C. DAVIS

HIAWATHA had a past Longfellow never knew about.

Movie stars, it seems, are not the only ones to lose their own pasts and become new personalities in the hands of a miracle-working press agent.

Longfellow made a new man of Hiawatha. He did it unconsciously, never dreaming that the Hiawatha he was immortalizing was a vastly different hero from the flesh and blood Hiawatha. But as a result of Longfellow's poetry, the literary—artificial—Hiawatha is the most famous Indian in America. The Hiawatha of history became a submerged personality.

Scientific research has brought the historic Hiawatha to light, and straightened out the mystery of what Longfellow's Hiawatha is "made of."

The real Hiawatha is disclosed as a cannibal. We may as well face that shuddery fact first. He reformed, it should be added hastily in fairness to him. And he had provocation, plenty of it, for doing something mad and desperate.

Cannibalism as Sublimation

Cannibalism happened to be an Indian way of taking it out on somebody else when you couldn't strike back at your real enemy. Nowadays, a man who couldn't strike back directly might try to get even with the world by bullying his office force, or, he might turn into an unscrupulous sharper in business.

The real Hiawatha lived about 1550 A.D. He had a genius for political planning. He lined up with an even greater Indian genius, and the result of that team was something new in government for Indian tribes. From their revolutionary scheme of Indian government, Jefferson seems to have got his inspiration for our United States of America. Without Hiawatha there might have been no United States as we know them.

All this being the case, Longfellow's "Song of Hiawatha" is a curious memorial to a great man.

If the real Hiawatha that Longfellow never knew could stride back from the happy hunting ground where he has been hunting all these four centuries, and if he found his way to a modern public school, he would be a puzzled redskin. He would hear seven-year-olds piping lustily in his honor:

"Smiling answered Hiawatha:
'In the land of the Dacotahs
Lives the Arrow-Maker's daughter,
Minnehaha, Laughing Water.'"

A Disillusioned Ghost

For half an hour, the distinguished unseen guest would listen to rippling lines about Hiawatha's bride Minnehaha, Hiawatha's ingenuity in concocting a birchbark canoe, Hiawatha's success in bringing the gift of corn from the gods to the Indian. And after that, we can imagine the shade of Hiawatha stumbling forth, and murmuring sadly to himself (doubtless, by this time, in Longfellowian meter):

"And I thought my deeds remembered.
Such is fame—O Hiawatha!"

As a matter of prosaic fact, Hiawatha's ghost has not been reported haunting schoolrooms. But the revival of Hiawatha's career and character is as impressive as the return of his ghost would be.

The real Hiawatha has one man in particular to thank for his rescue from oblivion. That man is J. N. B. Hewitt, an ethnologist who specializes in digging out the facts about the Iroquois tribes.

Up in his tower-office in the old Smithsonian Building in Washington, Mr. Hewitt has a stack of big envelopes containing the history of Hiawatha and his people. It is a long story—187 pages of manuscript. Mr. Hewitt took it down, translating as he went, from the dictation of a blind Iroquois Indian. Not once in the long recital, continued from day to day, did that blind Indian hesitate over his facts. He had learned tribal history so well long ago that he could still repeat the lessons.

This Indian had been taught in the old-fashioned way by the elders of the tribe. In the Indian way of education, lessons had to be taught orally and fixed in the memories of the young, and so passed on from generation to generation. There were no lesson books or writings among tribes north of Mexico.

All that ancient history of early American heroes, wars, migrations, and diplomacies is lost now, except what science can rescue here and there. The rising generation of young Indians knows almost nothing about such matters, so the salvaging of Indian history is not going to be possible much longer.

Hiawatha, Mr. Hewitt learned, had a rascal brother who was a powerful chief. The brother hated Hiawatha and determined to crush him. One by one, Hiawatha's wife and children were killed, poisoned probably, in the long, determined family feud. All this time Hiawatha dared not fight back. His brother had the arrogant and feared strength of a gangster chief. Added to everything else the brother had the reputation of being a wizard. Even the powers of darkness seemed to be with him.

In baffled rage against his brother, Hiawatha turned cannibal. Mr. Hewitt comments on this by saying:

Things Longfellow Never Knew

Hiawatha was a real Indian. He lived in the sixteenth century.

The Hiawatha of history was a cannibal—but he reformed.

The Hiawatha of history deserves a place in a national hall of fame. He and another Indian genius established an Indian league of nations. From that political invention of the Indians, it is believed, Thomas Jefferson got the idea for a United States.

Hiawatha had two wives, but neither of them was named Minnehaha.

Longfellow shouldn't have gone to Schoolcraft's writings for his Indian history. Schoolcraft was muddled in some of his information.

FIELDS

ASTRONOMY

Astronomers Search For Comet Seen in Europe

AMERICAN astronomers are on the watch for a faint periodic comet which has been rediscovered in Europe. Harvard College Observatory, the collecting center for astronomical information, was notified of the discovery and, in turn, sent the details to American observatories.

The comet is of the twelfth magnitude, which means that it is much too faint to be seen with the unaided eye or even through a small telescope. It is low in the eastern sky as seen from the United States, somewhat east of the constellation of Pisces.

Science News Letter, August 25, 1934

PHYSICS

Gamma Rays Split Apart Heavy Hydrogen Atoms

GAMMA rays, the same kind of radiation used medically for the treatment of cancer, are now being employed to produce artificial disintegration of atoms of the "heavy" hydrogen isotope, deuterium. The atom breakup achieved throws new light on the composition of the newly discovered "heavyweight" kind of hydrogen.

Prof. James Chadwick and Dr. M. Goldhaber of Cambridge University report to *Nature* that by bombarding diplons (deuterium atoms which have lost an electron and become ionized) with gamma rays having energies of 2,620,000 volts they have produced ordinary lightweight hydrogen atoms, and neutrons.

Diplons are known in America as deutons. They are much used as particles with which to bombard other substances and so cause disintegration. As ionized atoms of deuterium, diplons have twice the weight of ordinary hydrogen atoms.

Drs. Chadwick and Goldhaber indicate that to break down the diplons into their two constituent parts the bombarding gamma rays must have energies greater than the forces which normally hold the particles together. This condition is satisfied with gamma rays of 2,620,000 electron-volts energy.

The new discovery is expected to make possible more accurate estimates of how much a neutron weighs, a point on which various investigators differ at the present time.

A neutron is thought by some to be a composite particle consisting of an extremely close union of particles with positive and negative charges so tightly bound that there is no measurable external electric field. It weighs as much as a hydrogen atom but is much more tiny, and hence more penetrating when it strikes some other substance. So piercing is a neutron that it is difficult to distinguish between it and the packets of radiation called photons.

Science News Letter, August 25, 1934

VETERINARY MEDICINE

Animal Hospitals Now Use Modern X-Ray Methods

X-RAY examinations and surgical attention such as are now standard in the treatment of human hospital cases should be available for sick animals also, Dr. Alois Pommer, Viennese veterinarian, told the Twelfth International Veterinary Congress at its New York meeting last week. He added that medical treatment for animals is hindered in many cases by lack of X-ray apparatus and roentgenologists giving their full attention to veterinary work. Vienna's Veterinary College has established a central Roentgen institute, which aids the practitioners in animal surgery, internal medicine and obstetrics.

An increasing use of anesthetics and aseptic surgery has occurred in Great Britain's veterinary work, Sir Frederick Hobday, principal of London's Royal Veterinary College, reported. Animals are being given anesthetics as a customary procedure, chloroform being used on horses, cows and mature dogs, while puppies and cats are usually given ether or mixtures of chloroform and ether. There has been research on comparatively new anesthetics, avertin and nembutol.

In the United States, also, Dr. W. F. Guard of Ohio State's College of Veterinary Medicine reported, there has been marked improvement in the use of anesthetics and surgery. Great advances have been made in the general application of local anesthetics to all species of animals.

Science News Letter, August 25, 1934

RADIO

Radio Reception Affected by Moon

DOES THE MOON affect radio reception? Do owners of radio sets get stronger signals when the moon is full than when it is waning?

Dr. W. W. Perrett, Moravian missionary stationed at Hopedale, Labrador, has been keeping a log of radio reception on his set since 1925 and finds that the height of the ocean tide indicates times of good and bad reception, especially fading. The ocean tides, of course, are caused by, and follow, the position of the moon.

Despite the fact that Dr. Perrett is very near the "home" of the Aurora Borealis, or Northern Lights, this phenomenon does not markedly influence radio reception at his station.

The correlation between tides and radio was described by Dr. Perrett in a communication to E. F. McDonald, Jr., president of the Zenith Radio Corporation of Chicago.

In believing that the moon exerts a positive effect on radio, Dr. Perrett is supporting results already obtained by such men as Prof. Harlan T. Stetson, astronomer at Perkins Observatory, and Dr. G. W. Kenrick and G. W. Pickard.

Dr. Stetson has found that there is a daily lunar cycle of radio signal strength. The signals have a minimum intensity when the moon is forty-five degrees above the horizon and a maximum when the moon is thirty degrees below the horizon.

Dr. Kenrick and Mr. Pickard have found that there is a monthly variation of radio signal strength with emphasis on a half period, 14.75 days, and a full period of 29.5 days.

Science News Letter, August 25, 1934

SEISMOLOGY

Earthquake Located East Of Philippine Island

THE EARTHQUAKE that was recorded on seismographs all over the world, on Sunday, Aug. 12, had its origin in a deep portion of the ocean east of the Island of Mindanao in the Philippines. The location was determined by the U. S. Coast and Geodetic Survey from information furnished by Georgetown University, Manila and Honolulu observatories. The time of the quake was 6:49 p. m., E. S. T.

Science News Letter, August 25, 1934



AN INDIAN HOUSE OF REPRESENTATIVES

As Hiawatha and Dekanawida evolved it. The central figure is Dekanawida himself, and seated on either side are representatives of the five Iroquois nations. In the background appear to be the usual fringe types of any Congress—tourists, lobbyists, perhaps even reporters. This very beautiful panel is in the Wellesville, N. Y., Post Office.

"I doubt whether within the historic period of Iroquoian life cannibalism was a tribal custom. The whole structure of Iroquois government was exerted to prevent bloodshed. It seems rather that Hiawatha reverted to primitive ancestral ways. He would slay whatever unfortunate stranger crossed his path. And not only slay, but eat."

Hiawatha's sick madness of cannibal excesses made him an outcast. One day in the forest he had killed a man and was boiling water in the pot in his hut when he was startled by a vision. In the boiling water he saw a face looking up at him. The face was that of another Indian, Dekanawida, who had climbed on the roof of Hiawatha's lodge and was looking down the smoke hole.

To the unhappy Hiawatha this sudden appearance of the face was a mystic vision so impressive that he foreswore cannibalism then and there. Ready to see the world in a new light, he walked out into the forest. There Dekanawida approached him and talked about a dream of brotherhood, to band together the Iroquois tribes and eventually all the world.

For thirty years, the two Indian reformers worked to end warfare, murder, and strife. They were, Mr. Hewett says, like an Indian Messiah and St. Paul. Dekanawida evolved the plans. Hiawatha was his mouthpiece, eloquently arousing the tribes to the new cause. Some Indians today say that Dekanawida had a speech impediment, and therefore without Hiawatha he could never have given his message to the people.

Indian League of Nations

Out of the thirty years of political campaigning grew the remarkable League of the Iroquois. Five Indian nations in the region of New York and nearby Canada were banded together in this League of brotherhood and peace. Later a sixth nation was added. Each nation kept its independence. But each nation sent representatives to sit at a central council, to decide important matters. That was in its way the Congress of the Indian United States.

Only six tribes ever joined Dekanawida's and Hiawatha's league. But Mr. Hewitt thinks that the Indian reformers' dream may have had an even more far-reaching effect.

If Thomas Jefferson did not model the United States after the Indian league, where else did he get the idea? Nowhere in Europe was there such a government—a group of political organizations bound together securely, yet without sacrificing their independence.

If Mr. Hewitt is right in this speculation, then Hiawatha and Dekanawida deserve high pedestals in an American hall of fame.

Of all this sixteenth century Indian history, the poet Longfellow knew nothing. Longfellow never visited an Indian reservation in his life; so Alice Longfellow once stated plainly, to settle argument.

After all, Longfellow was a poet, not a scientist or historian. He did the best he could with the reference books of his day. The trouble was that scientific study of Indians was in a pioneer stage early in the nineteenth century. For his story of Hiawatha and for local color, Longfellow turned mainly to writings of an ethnologist named Henry Schoolcraft. This man Schoolcraft was one of the first to do scientific research among the Iroquoian tribes, and while he was an eager investigator, he was like a man wandering in a tremendous maze of strange languages and customs. Frequently, Schoolcraft got muddled, especially over the subtleties of Indian names and languages. Sometimes he put two and two together and made five or six of it without much doubting or hesitation.

So, Mr. Hewitt explains, when Iroquois Indians told Schoolcraft about their heroes Dekanawida and Hayenwatha, the latter name was the only one that stuck in Schoolcraft's memory. He caught and wrote down the name Hiawatha because it sounded to him vaguely like the name he had heard for an Indian god. By the time he got his notes shaped up for publication, Schoolcraft had mixed together not merely two characters, but three, to make one.

He had in the meantime gone among the Chippewa Indians of the Great Lakes country and heard all about their God of Life, so he added this Chippewa deity to his mixture of Hiawatha and Dekanawida. The result of mixing the three characters was as fantastic as if he had scrambled together everything he could find about Alexander the Great, Aristotle, and the Greek god Zeus.

In the composite Indian put together by Schoolcraft, very little Hiawatha except the name survived. The Song of Hiawatha as it turned out would better have been called the Song of Dekanawida, Mr. Hewitt points out. It is Dekanawida's thoughts on brotherhood that lift the literary "Hiawatha" to philosophic heights.

Poets have picked the wrong hero to immortalize more than once. A few years ago, Longfellow's poem on the midnight ride of Paul Revere was under critical fire. It was brought out then that the leading role in the Revolutionary adventure was taken by an ancestor of Col. Charles Dawes, Vice President of the Coolidge administration. Revere, patriot as he was and famous for many other achievements, was a secondary figure in the business of warning and signaling the Colonists, so the reports stated.

Hiawatha should have been called Dekanawida by Longfellow. The real career of the real Hiawatha would have made another great poem. And there

was no such girl as Minnehaha.

The real Hiawatha married twice but not to any lovely maid of the Dacotahs by the name of Laughing Water. Dekanawida devoted his life to his mission of bringing peace to the tribes, and nothing is said about his marrying.

It is believed that Longfellow got the singing name for Hiawatha's bride out of a book on the Sioux. In this book he read the legend about the beautiful waterfall in Minnesota known as the Minnehaha or Laughing Waters.

School children learn about Indians from Hiawatha, and that means that they get their introduction to Indian life as it was among Chippewa Indians, on the forest shores of Lake Superior. When Schoolcraft mixed a Chippewa god in with his Iroquois Indians to make Hiawatha, he gave him a Chippewa background. Schoolcraft found the Chippewas more interesting than the Iroquois. In fact, he became so intensely interested in one Chippewa that he married her.

When Longfellow studied the Schoolcraft legends, therefore, and wrote the lines beginning, "Give me of your bark, O Birch tree," he was describing a Chippewa canoe. An Iroquois would have made his canoe of slippery elm bark, for no canoe birch grew in New York State.

Longfellow's poem, as science sees it, is fantasy with a remote and confused historic background. But the spirit of "Hiawatha" is the spirit of the red man at his best. The forest life of the Chippewa described by the poet has given many a school child a glimpse into the Indian's lost world. And now science has given back to Dekanawida and Hiawatha their proper place in the roll of fame. So all's well that ends well.

Science News Letter, August 25, 1934

RADIO

THE DEPRESSION AND THE NATION'S HEALTH

an address by

Edgar Sydenstricker

Director, Public Health Activities, Milbank Memorial Fund

Wednesday, Aug. 29, at 3:30 p. m., Eastern Standard Time, over Stations of the Columbia Broadcasting System. Each week a prominent scientist speaks over the Columbia System under the auspices of Science Service.

PHYSIOLOGY

Curse of the Hapsburgs Claimed Spanish Prince

Alfonso's Son Inherited Fatal Bleeding Tendency Fom His Mother, Though Women are Never "Bleeders"

HEMOPHILIA, the hereditary disease of bleeding, that contributed to the death of ex-King Alfonso's fourth son, Prince Gonzalo, is one of the strangest of maladies.

It affects only the male but it is transmitted only by the female who herself does not have the difficulty. It thus skips a generation.

In the case of the ex-royal family of Spain, Queen Victoria, though herself not hemophiliac, nevertheless passed on to some of her sons the liability of severe and recurring bleeding. The eldest son, Prince Alfonso, who renounced his right to the now non-existent throne of Spain in order to marry a commoner, is also known to be a "bleeder," while the other two sons are reported as not being so afflicted.

In another way the "bleeding disease" has brought tragedy into the life of Spain's ex-royal family. Ex-King Alfonso in 1931 forbade his two daughters to marry because he realized the danger that they might transmit this ailment to some of their sons. This command broke off the engagement of the Infanta Beatriz to Prince Alvaro d'Orleans. By a coincidence it was the Infanta Beatriz who was driving at the time of the slight but fatal auto accident to Prince Gonzalo.

The disease also existed in the family of the last of the Romanoffs, Tsar Nicholas II. Alexis, the late Tsarevitch, was hemophiliac. It is said that the bleeding strain entered the royal families of Europe from the Hapsburgs, the ancient imperial family of Austria, and the disease has been called the "curse of the Hapsburgs."

Science has searched in vain for some simple method of determining whether or not a woman is a carrier of the ailment and is capable of passing it on to her sons. The only way to distinguish between those who carry and those who do not carry the hereditary strain is the practically uselesss method of waiting until sons and grandsons have been produced. Two tests, one of blood type and the other a reaction with cobra venc have been produced, but neither proved successful.

Experiments by Dr. Carroll La Fl Birch of the University of Illinois C lege of Medicine hold out hope t injections of one of the female sex h mones may be useful in treating disease. Working on the theory t there must be some factor in the wor which suppresses the disease when i present in her hereditary make-up, Birch hit upon ovarian extract as probable element in the female mech ism that held the disease in abeyar He therefore tried this substance treating two boy "bleeders" with couraging results. Other physicians not have the same success but the periments are in progress.

Science News Letter, August 25,

PHYSICS

New X-Ray Method Make Quick Analyses Possible

BY HOLDING a piece of metal to a beam of X-rays it is now po ble to tell quickly what are its chem constituents. This is the seemingly m ical method of analyzing metallic s stances announced by Dr. L. V. Har of Stockholm.

The Swedish investigator has alre built himself metallic "sandwiches" c sisting of paper-like strips of me piled one on top of the other. By sh ing X-rays at the laminated edge of metal "sandwich" Dr. Hamos has b able to tell what kind of metal used for each layer. In some cases edge of the metal strips was only 1/2 of an inch thick.

Reporting his new method of che ical analysis to *Nature,* Dr. Hamos plains that when the initial beam X-rays (all of the same wavelengt strikes the laminated edge it produ secondary X-rays, which come off fr each of the various kinds of metal luminated by the primary beam. Th secondary X-rays are characteristic



A bear totem on a grave at Ketchican. These emblems have no religious significance, but are simply family crests, recording the genealogy of the tribe

Columbus[Ohio] Journal JUL 1 - 1928

Indian Legend

AN-NIK-A-DEL, edited by Dr. C. Hart Merriam; the Stratford Co., Boston. $2.

THIS is a briefly recorded and concisely edited account of the history of the universe as it has been handed down through the ages in the legends and folk lore of the Indians of North ~~Carolina~~ California. Dr. Merriam is a student of Indian lore and he has caught in full the spirit oof his topic. His subjects are as interesting as their legends, and the colorful atmosphere that abounds through the chronicle is as charming as the folk tales themselves.

He records how these Indians have been told that the foam of the ocean was used in the beginning to create the earth; how the first peoples were strange creatures that were half-beast, half-man, wholly animal; how the woman from the sun and the man in the moon were transported from the ocean, then set in space to shine forever; how the first peoples ruled the world for countless eons, then were conquered by savage animals, who in turn gave way to the people of this day—in the case of the Indians of North ~~Carolina~~ California, themselves.

Charming, quaint and fascinating, this volume will lighten any gloomy hour and give an intimate insight to the workings of the southern Indian's mind.

LITERARY CLIPPING SERV
96 WARREN STREET,
NEW YORK, N. Y.

News
Pensacola Florida

July 15 - 1928

Among students of the Classics it is well known that Lucretius, the Latin poet, anticipated Darwin's theory of evolution by about 1900 years. And now comes Dr. C. Hart Merriam, famous naturalist, physician, and ethnologist, and shows that the American Indians also had a vague belief in evolution long before Darwin's day. In his latest book, "An-nik-a-del," which is a history of the universe as told by the California Indians, and which is about to be published by The Stratford Company, Dr. Marriam tells in a series of fascinating stories how the earth, according to the belief of the Indians, was made from Ocean foam, and came to be inhabited by strange beings— half animal but with very human characteristics; how the First People, the Animal People, dominated the earth for thousands of years and finally turned into Real Animals and were then replaced by Real People.

SAN FRANCISCO, CALIF.
EXAMINER
AUGUST 5, 1928

Indian Story Of Creation Written

By N. L.

THE story of how the world came to be is recited by the Modesse Indians of California during the winter season. It is a protracted devotional ceremony, which has been repeated for years innumerable. A distinguished Eastern naturalist, C. Hart Merriam, M. D., happened to hear about it from an Indian friend when he was visiting California. So, with the latter's help, he set himself to writing down the history of the universe. When freed from its ritualistic repetitions, it resolved itself in a series of fascinating tales, which the scientist has now collected in one volume, entitling it "An-nik-a-del." The book is published by the Stratford Company of Boston, Massachusetts.

It was Istet Woiche, an old Modesse Indian known to the whites as William Hulsey, who patiently acquainted Dr. Merriam with the religious history of his people, an instruction which lasted, with intervals, for twenty years. This Indian is Speaker and Keeper of the Laws, History, and Chronology of his tribe, and on important occasions represents the Chief. The Modesse Indians, according to the scientist, live in the densely forested Big Bend Country of Pit River, in the northern part of Northern California. They belong to the Achomawan stock.

"Like other California tribes, they possess a precious legacy in the richness of their mythology," says the scientist. "This, however, is known to so few of our people that it is still the practice of American schools and universities to seek in foreign lands the myths with which to stimulate the imaginations of the upcoming generations."

The legends dealing with the creation of the world by An-nik-a-del's grandfather and those telling of the Animal people, who were created first, then turned into animals to make way for the later, real people, are full of poetic beauty.

LITERARY CLIPPING SERVICE
96 WARREN STREET,
NEW YORK, N. Y.

Star
Kansas City Mo
Aug 11-1928

Indians Believed in Evolution.

Dr. C. Hart Merriam, naturalist, physician and ethnologist, shows that the American Indians had a vague belief in evolution long before Darwin's day. In his latest book, "An-nik-a-del," a history of the universe as told by the California Indians, Dr. Merriam tells in a series of stories how the earth, according to the belief of the Indians, was made from ocean foam, and came to be inhabited by strange beings, half animal but with human characteristics; how the first people, the animal people dominated the earth for thousands of years and finally turned into real animals and were then replaced by real people.

Sacramento Bee [Daily]
May 12, 1928

Pit River Indian Folk Tales Are Transcribed By Dr. Merriam

An-nik-a-del, by Dr. C. Hart Merriam. The Stratford Company, Boston. $2.

An-nik-a-del is "The history of the Universe as told by the Indians of Northern California." Istet Woiche, historian and leader of the Modesse or Pit River Indians, has been a friend of Dr. Merriam, the naturalist, for twenty years and during that time has told him the stories which his tribe has handed down from generation to generation through thousands of years.

These fascinating stories are to the Indian what religion has been to the white man. They are the Indian explanation of the Universe and how the earth came to be peopled. As this is one of the best known tribes of Superior California, the myths are doubly interesting to the California reader.

To the Indian all things are now, or at one time were alive. The earth at first was but floating ocean foam. It grew and Tikado Hedache, the world's heart, finally set it in motion—the Indian conception of the earth rotating and the sun standing still, being more correct than that of the white races until a few hundred years ago.

These tales throw additional light on the intelligence of the Indian in his natural state and prove many of his so-called "heathen beliefs" less ridiculous than the superstitions of his conquerors in the days when witch burning was still in vogue.

LITERARY CLIPPING SERVICE
96 WARREN STREET,
NEW YORK, N. Y.
Herald
Charleston, S. C.
July 22-1925

Indians Believed in Evolution

Among students of the classics it is well known that Lucretius, the Latin poet, anticipated Darwin's theory of evolution by about 1,900 years. And now comes Dr. C. Hart Merriam, famous naturalist, physician and ethnologist, and shows that the American Indians also had a vague belief in evolution long before Darwin's day. In his latest book, "An-nik-a-del," which is a history of the universe as told by the California Indians, and which is about to be published by The Stratford company, Dr. Merriam tells, in a series of fascinating stories how the earth, according to the belief of the Indians, was made from ocean form, and came to be inhabited by strange beings—half animal, but with very human characteristics; how the first people, the animal people, dominated the earth for thousands of years and finally turned into real animals and were then replaced by real people.

LITERARY CLIPPING SERVICE
96 WARREN STREET,
NEW YORK, N. Y.
New Republic
July 15-1925

Lo, The Indian

My People, The Sioux, by Chief Standing Bear. Boston: Houghton Mifflin Company. 288 pages. $4.

Memoirs of a White Crow Indian, as told by Thomas H. Marquis. New York: The Century Company. 365 pages. $3.

An-nik-a-del, The History of the Universe as told by the Indians of Northern California, edited by Dr. C. Hart Merriam. Boston: The Stratford Company. 160 pages. $2.

LO, the Indian, as presented in these three books, appears to be better able to speak for himself than to have others speak for him.

As far as we are concerned, Chief Standing Bear gets the prize. His is the autobiography of a full-blooded Sioux. He has written a plain story that carries more conviction than most books of its kind. There is an element of tragedy in the ground he covers. He went on only one buffalo hunt before he entered the Carlisle Indian School, at the age of eleven, where he was the first boy of the first class. The day of the tribe was drawing to a close. At school his hair was cut short, he was given the Christian name of Luther, was taught to wear store clothes, to read and write and use Arabic numerals, to play the B-flat cornet and, above all, to make good. You appreciate what a sincere pride he took in leading the school band when he was fourteen years old at the opening of the Brooklyn Bridge, what a responsibility he felt in being the first Indian chosen to work in the Wanamaker store in Philadelphia, how he glowed when he took his first communion. Later he traveled with the Buffalo Bill show in England, shook hands with Edward VII, preached, taught school, conducted stores, ranched and even acted in the movies, all without losing a strong, simple identity.

1834 KALORAMA ROAD
WASHINGTON, D. C.

Nov. 14, '28.

Dear Hart,

The first advance copy of the book came from Judd & Detweiler today, for me to take to the ball! It looks good to me! I can hardly believe it is done.

The actual date of publication is the 30th inst as November 15th.

Love to you both. Florence.

Rec'd. at Laguna Beach, Calif.
Nov. 20, 1928 - EMM

Oakland, Cal
Oakland Tribune
3/22/24

Pitt River Indians

The writing of Dr. C. Hart Merriam upon the Indian life of the west, and especially of California needs little comment or recommendation. For many years he has been working with these aboriginal inhabitants of the land, studying their ways of living, and their beliefs and attempting to aid them. He has written many books upon this, his favorite subject. But probably none are any more interesting than his latest work, An-Nik-A-Dell, the history of the universe as related by the Pitt River Indians. The tales were given Dr. Merriam by Istet Woiche, leader and keeper of the records of the Modesse Indians, a branch of the Achomawan family. The tales, which are more than mere stories with the Indians, being an exposition of their beliefs, tell the story of An-Nik-A-Del," a kindly divinity who went about through the air doing good. They tell how he discovered another world but was killed and came to life again. There are included the tales of Edechewe, the Traveler, who, through his magic powers, managed to overcome the demons of evil; Ah-mahl the flower maiden; of Jamul the coyote man, one of the great cultural heroes of the California redman, who was greatly gifted with powers and magic and who was accompanied by the Raven. Doctors who brought Jamul back to life again every time he was killed. The stories are fascinating and cause the reader to wonder at the development of such sublime thoughts and beliefs in such primitive peoples as the California Indian. One is made to ponder over how the great creation story could have originated wherein is told of how the earth was made from ocean foam and came to be inhabited by strange beings half animal, but with human characteristics. The story tells how the Sun-woman and Moon-man were taken from the western ocean to the far east; of how the animal people dominated the earth for a thousand years only to be turned into real animals when the first real people arrived upon the scene.

The mythologies of the California peoples, according to Dr. Merriam, go back much farther than those of the people of Europe and Asia, for they tell of the doings of the first people, the Animal People. They tell of the darkness that enveloped the earth; of the search for fire; of hunting exploits and adventures; of battles with monsters and evil spirits; of personal attributes—such as physical prowess, kindliness, selfishness, and their consequences; of amazing supernatural powers, of the destruction of the First People by flood and otherwise; of the great transformation into animals and finally the creation of the first real people, the Indians. The Pitt River Indians have lived so close to nature for so many thousands of years, and have been on such intimate terms with nature, that they, in their minds, form a part of nature. They endow animals with attributes and reason similar to their own, and recognize in them a kinship of activities, relationships and powers.

To anyone interested in beginnings and folklore the present work will be intensely interesting.

("An-Nik-A-Del," by Dr. C. Hart Merriam: Boston; Stratford Company. Price $2.)

Some New American Mythology.

AN-NIK-A-DEL: THE HISTORY OF THE UNIVERSE AS TOLD BY THE INDIANS OF NORTHERN CALIFORNIA. Recorded and edited by Dr. C. Hart Merriam. Boston: The Stratford Company; $2.00.

It is fortunate for lovers of folklore that so eminent a naturalist and competent an anthropologist as Dr. C. Hart Merriam has passed so much time in the course of his professional researches in the heart of the Modesse country, where he learned at first hand the interesting stories involved in religious beliefs of the Pit River Indians. In thus faithfully recording their tribal myths, Dr. Merriam has given us the veritable Bible of these gifted aborigines. The value of the book is enhanced by seven beautiful illustrations, from photographs taken by the author on as many "historic" (as the Indians see it) sites, including "the Jumping Rock of the First People," at Big Bend of Pit River, the story of which is given in Chapter XVII. Very interesting also is the photograph of Istet Woiche, leader and historian of the Modesse, with his wife, at their home near Big Bend.

No better illustration of the influence of environment in determining the nature of a people's mythology or religious history could be found than in the case of the Modesse Indians, a branch of Achomawan stock. They live in the densely-forested Big Bend country of Pit River, and their myths fully reflect the characteristics of such a locality.

It is interesting to learn from Dr. Merriam that the mythologies of California Indians go back much farther than those of the people of Europe and Asia, "for they tell of the doings of the First People, the Animal People—curious beings, neither animal nor human—who immediately before the appearance of Real People were transformed, not into Indians but into real animals, trees, rocks, and other natural objects. They tell of the darkness that enveloped the earth; of the search for fire; of hunting exploits and adventures; of battles with monsters and evil spirits; of personal attributes—such as physical prowess, kindliness, selfishness and jealousy and their consequences; of amazing supernatural powers; of the destruction of most of the First People by flood or otherwise; of the great transformation; and finally of the creation of Real People (Indians). These mythologies constitute the religions of the various tribes."

After reading these delightful stories, one wonders, with Dr. Merriam, why so many schools and universities seek in foreign lands the myths with which to stimulate the imaginations of the upcoming generation, while such real materials remain to be recorded here in our native land. We may be thankful that Dr. Merriam fully realized the value of the materials close to hand, and has given us an authoritative work on the religion of our northern California Indians. To this should be added our gratitude to Mrs. E. H. Harriman, through whose interest and generosity a fund was established for Dr. Merriam's years of study in the Pit River country.

MAYNARD SHIPLEY

Orthodoxy Well Defended.

THE POET OF GALILEE. By William Ellery Leonard. New York: The Viking Press;

Mr. Leonard, as has been
by both his prose and his
a poet. This work,
but long out of pr
the beauty of his
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Myths: Konomeho

C. Hart Merriam
Papers
BANC MSS
80/18 c

~~Konomeho 16~~

~~Panther & Wildcat become~~

~~THE WATER ROCKS~~

KONOMEHO

1. The Panther and his brother the Wildcat lay down together at the head of Little North Fork of Salmon River near the place where the White Man's tunnel goes in.

They said, "We are going to turn into rocks and make a ringing sound when the water drips on us."

Anyone can see these rocks and hear the noise like a White Man's bell when the water drips on them. They are not really rocks, but are the Panther and his brother, the Wildcat, turned into stone.

Water dripping on rocks is called hoo-ah-tin-tin-nik.

Karuk

~~CREATION~~

2. Coyote Man was in the beginning. He had grown up in the center of the sky. He went out every day to look over all this world. Nothing was showing. There was no world yet. He went out every day for 9 days and nothing was showing.

On the ninth day he saw little mountains sticking up. On the tenth day the whole world showed up.

Then he said, "I am the best. I grew up first."

He went out again at noon and looked all over the world again. He saw smoke rising from Ahf-fum (Orleans Bar).

He said, "This is going to be bad." He saw another smoke rising from Ik-ne-sish (Bald Hills). By evening ten smokes were to be seen.

Then he said to himself, "What are we going to do?"

Then he said, "Now Ground Children(meaning Indians) are growing, so there is going to be sickness."

Then he said to his children, "Let's try to make some kind of sickness."

Then he went out and took all kinds of roots. He came out at Plummer Creek. He had with him all kinds of roots.

When he returned to his place in the middle of the sky, he saw that all of his ten hildren were dead. Blood and other stuff came out of their mouths, ears, nose, and all over.

Then he said, "That is what people are going to get -- that kind of sickness. They will be all cramped up and twisted and everything."

Then he took the medicine he had collected from all kinds of plants and gave to all of his dead children. He opened their moyths and gave it to them.

Then all the children began to cry out at the same time, and all came to.

Then he said, "This is the way people are going to be if they know my medicine."

Then he said, "Ground Children are going to grow up and

be people."

He said to the Deer, "Look out. They are going to kill you."

They were all animal people then. The Klamath Indians were Mice People. Our Konomeho people were Wolf People, but they had turned into Indians. The world had grown then.

Coyote Man said, "Everything is going to grow. Indians are going to grow up on the grohnd. These are going to be Indians now."

Coyote Man had first made some little people: Ant People and other insect people. These ~~were~~ scattered all round and said ~~and said~~ they are going to be Deer and Bear and all kinds of animals. Then all kinds of animals came, and among them the Grizzly Bear.

Then Coyote Man went back up into the sky to visit ~~the~~ his own ~~Sun~~ People. When he arrived there, he found ten million little girl quails up ~~in the sky in his country.~~ there.

He thought it all over and said "Those are the stars". And

he threw them about in the sky and they became stars. The Father Quail became the Moon and the Grandfather Quail, the Sun.

Then Coyote Man came back and turned himself into a wild animal, Coyote.

He said, "I will eat people, if I can catch hold of them. If they are bad to me, I will be just the same to them. The Grizzly Bear and I will be sneaking round close to Indian houses. If they are mean to us we will be eating ~~everything~~ their children when we see them running round.

Misc.

Myths : Midoo

C. Hart Merriam
Papers
BANC MSS
83/13 c

MERMAID MYTH OF THE CHICOMIDOO

Among the tales of the Chicomidoo is one which recites that a man was wading in a small lake near the present Greenland, when "suddenly there arose from the water a beautiful woman who wound her arms around the man and threw him down."

G. A. Chambers, Journ. Am. Folk-Lore, Vol. 19, p. 141, 1906.

TRADITION FORMERLY OBTAINED AT CHICO by G. A. Chambers.
Jour.Am.Folk-Lore XIX, Apr-June,pp.141-2, 1906

Indians living along bank of Chico Creek.

CREATION MYTH MIDOO

E.G.Waite's historical sketch of Nevada Co., Calif., contains, among other Indian matter, a creation myth as related to him "by an Indian, in broken English. He received it from an old man who dreamed it, he said."

Waite calls the Indians "Diggers" but says they call themselves "Oustomah Midah."

--E.G.Waite, in [Edwin F.] Bean's History and Directory of Nevada Co., Calif., 27-28, 1867.

midu

Journ. Amer. Folk-Lore, Vol. 19, P. 144. 1906

NOTES ON CALIFORNIA FOLK-LORE.

By G.A.Chambers.

Tradition formerly obtained at Chico.

The Indians formerly living along the bank of Chico Creek made frequent excursions southwestward into the Sacramento valley for the purpose of gathering acorns, fishing, and hunting jackrabbits. At one time they were camped not far from a lake, which was a few miles from where the little town of Grainland is now located. A single tree stood near the bank of the lake. A young man was sent to the lake with a basket to bring water. He did not return. After a time the people, thinking he had forgotten his errand, sent another man. He also failed to return. Alarmed at the disappearance of these two men, the people held a council. It was decided to send a third man for water and with him another to watch and discover if possible what had befallen the two who had previously gone. Two men were selected and went to the lake. The watcher cautiously approached and climbed into the tree near the lake. Seated upon a branch overlooking the lake, he saw his companion wade out into the water. Suddenly there rose from the water a beautiful woman, who wound her arms around the man and drew him down. In fear the watcher descended from the tree, hurried to the camp and brought the news, whereupon the band immediately left the vicinity. Since that time none of these people have approached the lake.

THE WIND DEITY

In (Roland) Dixon's in his 'Maidu Texts' ~~one of the myths~~ tells of an early personage or divinity who was much troubled by ~~the~~ evil winds. He said: "I have come from afar to this country, for I do not like to see these bad winds blowing about. The Wind-Man is a bad man, one who carries much sickness; and if he blows upon mortal men, they will be very ill. So I was going to stop this Wind-Man. The Wind-Man carries many weaknesses, he carries many coughs and colds, carries many sicknesses of all kinds. The Wind-Man carries very cold winds; and when they begin to blow in this country, mortal men can hardly see the ground. That is the kind he is. I do not want to see him do that way. The Wind-Man carries great sickness."

Roland B. Dixon, Maidu Texts. Vol. 4 Pubs. Am. Ethn. Soc. p. 130, 1912.

Myths: Piute

C. Hart Merriam
Papers
BANC MSS
80/18 c

RABBIT MYTH (Ta-Vwots fight with the sun).--

So. Piute (Moapa or nearby).--

J.W.Powell: Rept.Bur.Eth. for 1879-80: 52-56, 1881.

WOLF MYTHS:

So. Piutes (?).—

J.W.Powell: Rept.Bur.Eth. for 1879-80, 44-45, 47-51, 1881.

Myths (Utes & Southern Piutes)

Sketch Mythology N Am Indians

J W Powell

Am Rep't Bureau Ethn for 1879-80

19-52, 1881.

-56

Echo - Argus

Augusta (So Printed?)

Ann. Rep. Rept for 1879-80

45-47, 1881

Powell, J. W.--Mythic Tales(probably all Ute)

The Cin-au-av Brothers discuss matters of importance to the Utes------pp. 44-45

Origin of the echo-------pp. 45-47

The So-kus Wai-un-ats----pp. 47-51

Ta-vwots has a fight with the sun-----pp. 52-56

Bur. Eth. Rep., 1879-80, 44-56, 1881.

PIUTES OF NEVADA

Mythology as to the demon-deity in Pyramid Lake.

Bancroft, Native Races, Vol. III, p. 135, 1875.

P I U T E S

(Sarah Winnemucca Hopkins, Life Among the Piutes
1883.)

Mythology (pp.6-7)

Domestic and Social customs (pp. 45-55)

Burial custom (p. 70)

Traditions (pp.73-75)

Antelope hunting and charming (PP. 55-57)

NW Nevada

MYTHS PIUTE

260

"The Piutes have a legend according to which they owe their origin to the marriage of a white wolf and a woman. The white wolf came from the far north, and the woman, who was the daughter of a great chief, came from the south.

The Piutes, according to the legend, are the descendants of this strange pair.

Away north, on the summit of a high bluff on Pitt River, is to be seen a huge white rock which, when viewed from certain points, bears a striking resemblance to a wolf in a recumbent position. To this day, many of the Piutes point to this rock and say that it is their great father—the father of all the Piutes—that he never died, but was changed into this rock, in which he still lives. I once told this story to an old and very intelligent Piute, and asked him what he thought about it. He said: 'Who told you this story, Tom or Natchez?' referring to two of the sons of old Winnemucca, the head chief.

'I have heard it from Tom, and also from many other Piutes,' said I.

'O,' said he, 'it is only a story of times long ago. It was while we were still Shoshones, that this happened. You have heard the story the way the old women tell it.'

He then proceeded to say that, a very long time ago, there 263
⌈was a great war between a tribe of Indians living in the north, the name of whose chief was White Wolf, and a tribe living in the south. For years they fought every summer, and many on both sides were killed. Still, the old men would stir up the

young men to continue the strife. At last both tribes grew weak and weary of the long war, and at a big council it was arranged that the White Wolf should marry the daughter of the chief of the tribe against which he had so long drawn a hostile bow, and thus all difficulties were settled. The two tribes settled down and lived together, all as Shoshones.

The old Indian then proceeded to give me the true and most ancient tradition that has been handed down in the tribe, in regard to the origin of the Indians living in the Great Basin. He said that the Indians were made by a man and his wife, who came from he knew not where. They made the Indians of clay and something else, taken out of the water, the English name of which he did not know. After the Indian men and women were made, the man made all kinds of animals; as bears, deer, antelopes, buffaloes, rabbits, wolves, and the like. The woman made the birds and the flowers, and all the fishes in the rivers, and the grass and the nut-pine trees, and all the bushes that bear berries.

The man taught the men to make bows and arrows, spears with which to catch fish, and nets for use in fishing and taking rabbits. He also taught them to build and navigate tule (a giant bulrush) boats, for all the country was then covered with great lakes, and the tops of the present hills and mountains were islands. The woman taught the Indian women to make baskets and how to prepare food and do all things proper to be done by women.

After they had done all these things the mysterious pair took their departure, going away to the southward." 1876.
--Dan De Quille (Wm.Wright), History of the Big Bonanza, 260-263,

"Juan one evening told me the story of a wonderful cave in a region far to the northward, where his tribe lived in the days of his fathers—long and long before they came south, and long before the first white men crossed the Plains. This cave was in the side of a great mountain, and when the Evil One tried his hand at creation and began to make scorpions, tarantulas, snakes, horned toads, cactus, deserts and pools of alkali water, the Good Spirit (Pahah) caught him and put him into the cave, closing the entrance with a great mountain. There, far down in the ground, for many hundred of winters the Evil One used to roar and bellow. At times the hills trembled with terror; great rocks were shaken from their beds on the mountains and rolled down into the valleys, and fire came up out of the ground. Some of the mountains burst open, and one—a great one—sank down out of sight and left in its place a broad lake.

The hill rolled off the mouth of the cave at this time and the devil came out and flew away toward sunrise. So large was he that, though he flew more swiftly than a hawk, his wings had not passed over when three sleeps were done. They shut out the light of the sun. There was no moon or stars. The medicine men said there would be no more day till the Evil One was again shut up, for he was very mad and had swallowed the sun, moon, and stars. The medicine men, however, held a council and by burning a great deal of buffalo haïr made such a smoke as to make the devil very sick, when he vomited up the sun, moon and a great many stars, and it has been light ever since; but now there are not so many stars as in former times. Since the

flight of the Evil One there has been no more groaning in the mountains, and the hills have ceased to tremble.

After the devil left the cave, a great buffalo came and lived in it . This buffalo was larger than 20 ponies, and had horns growing out of his nose. All the other buffalo went into this great cave every winter to see their big chief and did not come back till spring. At last this big buffalo got to be so old and weak that when he went to get a drink at the lake where the 277 mountains had sunk, he stuck fast in the mud. The Indians there found him, and got all round him, and for three days shot him full of arrows and beat him with great stones. Still he was not dead. They then built a big fire on his head, and so killed him. Afterwards, an old man came out of the cave. His hair was as white as snow, and reached to his hips. The Indians called him Taweeta. He never spoke to living man, for he had seen the Great Spirit and had spoken with him, and therefore dare not again speak the language of man.

Taweeta was very wise; he had seen the place where the sun sleeps, and had visited the wigwam where a great black man keeps the thunder in a gourd; he had been allowed to view the happy hunting-grounds, where all who die like men are permitted to live and hunt in peace forever; and he knew the place where winter hides from summer and where the summer has its home."

--Dan De Quille (Wm.Wright), History of the Big Bonanza, 274-277, 1876. and also p. 275.

D. La Rhonton

NW Nevada
PIUTE

MYTHS

279

"The Piutes believe in a heaven and a hell, a good being and an evil being. God, or the Good Spirit, they call 'Pah-ah;' the devil or the Evil One, they call 'Avea-dagii.' Heaven is a delightful place where there is plenty of good water, and abundahce of game and droves of stout squaws, to do all the work—no rest for the poor squaws, even in heaven. Hell is one vast burning desert; no water there but that which is red with alkali, and which burns like fire when swallowed. When the bad Indians try to get out of this, and essay to climb the hills 280 to the happy hunting-grounds, they are thrust with brands of fore, and so wander back across the burning sands to meet with the same treatment in trying to escape on the other side. Thus they wander forever; always trying to escape, and always thrust back into the burning desert. They have preachers—Piutes—among them who preach very good Methodist doctrine. They sometimes begin preaching early in the evening and preach all night—telling the Indians that if they lie, steal, and murder, they are sure to bring up in the great desert, 'tooroop,' when they die."

--Dan De Quille (Wm.Wright), History of the Big Bonanza, 279-280, 1876.

Dem to a Curator.

SONG RECITATIVE IN PAIUTE MYTHOLOGY. - Edward Sapir, Folk-Lore, Vol.XXIII, 455-472, Dec.1910.

Piute Chapter

The following was written for the Austin (Nevada) Reveille sometime between 1873 and 1878, by its editor, Fred H. Hart.

"The fandango, or dance, is a species of thanksgiving 210
festival, held in accordance with instructions, from a source which will be mentioned below. The Shoshones and Piutes, unlike Fennimore Cooper's and Ned Buntline's Indians, have no belief in a "Great Spirit" or "Happy Hunting Ground." Their idea of a hereafter is a place where millions of fat crickets are always roasting, and thousands on thousands of ponies roam around on grass-clad hills, with red blankets strapped to their backs; and the being they worship, and in whose honor these festivals are given, is a traditional Indian, whose history the medicine-man gives as follows:

"Heap sun-ups, maybe long time ago," a mountain in the 211
Goose Creek Range suddenly became very much disturbed. It rocked violently to and fro, sending forth loud noises resembling exaggerated human groans. The Indians, who at that time flocked in large numbers to that locality to gather pine-nuts, were greatly terrified at the actions of the mountain; but they could not flee -- they were chained to the spot by a sort of fascination, and all their efforts to tear themselves away were fruitless. They huddled in groups at the foot of the mountain; the men pale with fear, and the women and children wailing and crying.

The mountain continued to labor for many days; when, at last, one night, when the sky was of inky blackness, a bright

ray of light shot up from its peak, and in a few seconds the entire sky was illumined by a dazzling light of rosy hue. The assembled Indians with one accord cast their eyes to the peak of the mountain, when there slowly emerged therefrom the figure of an Indian. The figure was about ten feet in height and straight as an arrow. It was clad in buckskin richly embroidered with beads; its ears and nose were decorated with bead rings; the head was surmounted by the pinion of an eagle, and around its waist was a belt containing upwards of three million (according to Indian count) glass beads. For full ten minutes the figure stood gazing at the astonished and terrified Indians, when, fixing an arrow in his bow, he discharged it at a range of hills opposite him. A flash of light like the trail of a meteor followed the discharge, and in a moment the range, which was before barren, was covered with <u>pinons</u>, laden down with luscious pine-nuts. Anpther discharge of an arrow at the stream which rippled at the foot of the mountain, and the river was almost overflowing with fish. The figure then pointed its finger significantly at the large rock on which it was standing, and slowly disappeared into the mountain, which then ceased its shaking and rumbling; the light went out, and a solemn silence came over the scene.

The next morning, Salamahowich, a mighty warrior, who was then chief of the tribe, ascended the mountain, and stepping on the rock on which the figure had stood the night before, it suddenly gave way with him, and in a moment he found himself in the interior of the mountain. The description of the place in which he found himself, as given by the medicine-man, is beyond

our powers; but he gave us to understand that the floor "all 211
the same half-dollars," (meaning silver) and the roof "heap
all same him," pointing to a cluster of icicles dependent from
a porch, by which we suppose he meant it was covered with
stalactites. While the chief was lost in admiration of the
magnificence of his surroundings, the figure of the night
before emerged from a recess in the cave, and bidding the chief
to seat himself, he told him that he was the Savior and Guardian
of the Shoshone tribe, born but the night before, and that the
mountain was his mother. He commanded the chief to take word
to the tribe, and to tell them that so long as they obeyed a
certain code, which he laid down to the chief, but which is 212
too long for repetition here, so long would he be their guar-
dian and protector. Among other things he demanded that a con-
stant guard should be kept at the mouth of his cave; and that
no human being should be permitted to enter it; and that at a
sound which he would strike on an immense boulder of pure
silver, which stood near the mouth of the cave, signal fires
should be built directing the tribe to dance in his honor.

It is doubtful if any white man could find the locality of
the mountain, or even if he would be permitted by the Indians to
enter the region....but when fires which flash seven times seven
times are seen on the mountains, it may be set down for cer-
tain that the big Indian is hitting his boulder, and then
follows a grand fandango, which is religiously observed without
regard to season or weather, oftentimes being held during a
fierce snow-storm, or on nights when the thermometer is so
low that the mercury tries to crowd itself out of the bottom
of the instrument."

Hart, Fred H. Sazerac Lying Club. San Francisco, 1878

Myths. The Heart of Oregon by Millican, Ada B. 1914

C. Hart Merriam
Papers
BANC MSS
80/18 c

The HEART of OREGON



Legend of the Wascos

by

ADA B. MILLICAN

PRINTED IN CROOK COUNTY
by
The Bend Bulletin

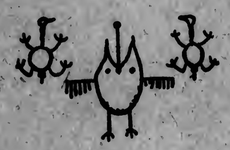
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Ada B. Millican

THE HEART of OREGON

Legend of the Wascos

by

Ada D. Millican



Millican, Crook County Oregon.

Colista M. Dowling
Illustrator

INTRODUCTION

THE FOLLOWING INDIAN LEGEND AGREES WITH THE "READING OF THE ROCKS."

According to Geological lore the waters of the Ochoco and Crooked Rivers flowed into the basin where Prineville (Central Oregon) now stands, extending to the Smith Rock Hills some fourteen miles below. These Smith Rock Hills are of the old Geological formation. The new formation or recent flow of lava runs up to the confluence of the Ochoco and Crooked Rivers or to the south of Crooked River as shown on the grade south of Prineville. This lava flow continued down to and below the Smith Rock Hills to the Deschutes River, and lapped up on the Hills, making a dam and forming a Lake which was fed by the streams of the Ochoco and Crooked Rivers.

The action of the water in cuting its way thru is shown by the various strata in the walls of the canyon of Crooked River, notably at the railroad bridge which spans the canyon at a height of over three hundred feet.

The Heart of Oregon

LEGEND OF THE WASCOS

When our fair land was in its youth----
When rivers ran from North and East----
When walls of water lifted high
And filled the valley level full,
The waves lapped the rim rocks' edge,
And sunbeams shone on rippling wave,
A mighty rock wall, toward the West,
Barred back the waters deep and still.



"Looked long with gaze so full and wrapt
Down into eyes that answered back."

Close beside the Lake's deep brink,
Stood Warrior proud with love-lit eyes----
Looked long with gaze so full and wrapt
Down into eyes that answered back.
Stood a maiden coy, whose heart was won
By this strong warrior at her side;
Their vows were plighted.
The fleecy new made clouds
Did float and hide the gleaming sun's
Bright rays.
The timid deer and antelope
Came down and drank
Then lightly ran, as unafraid
They gazed upon the lovers glad.

The bird sang low from leafy tree
Sweet lovelilts to his joyous mate,
And Earth and Sky seemed brighter,
And beamed upon the happy twain----
Their most gracious gifts----
And all the world did love the lovers
Save one,
And he with evil lurking in his eye,
Stood near and gazed with hatred
On his rival bold.
Hidden beneath a ledge nearby
He looked upon these lovers fond
And vowed within himself
Since he could not this maiden win
Neither should the rival long his
Happiness enjoy.



And so the lovers lingered
Till, as the sun was sinking low,
The maiden loosed her light canoe
And stepping in, bid fond adieu
To Warrior brave.
As o'er the lapping wave she homeward sped
The paddle dipped with rhythmic stroke
While gladly trilled her song of love.
The warrior stood with saddened heart
To see his loved one glide away
Across the Lake----
Yet in his heart he felt no fear.
He turned him round
And taking up his lance and shield
Strode back across the desert plain,
Out to his forest home
And to the chase----
For he must work, a home to make
For his beloved.



The hating rival, blind with rage,
Stepped from his hiding place unseen,
Down to the water's edge, to view
The gliding craft and maiden fair.
His bestial fury knew no bounds;
He lashed his long, lank arms and cried----
He summoned all his Evil Imps
From out the depths
And bade them gather their foul forces of
Destruction
To spend upon the lake from shore to shore----
The light and fleecy clouds so soft and white
At his command did rise and gather blackness
And descend upon the waters.
The thunders rolled and cracked
And clanged from crag to crag!
And forth from out their sulphurous depths
Flashed tongues of fire
That lighted up the direful mien
Of this accursed fiend of wrath.



Then with fearful crash and roar
The Evil Imps descended low
And, sweeping down with ghoulish glee,
The frail canoe enveloped
And Maiden Fair sank down to rise no more.
Then, having spent their hellish hate,
Back to their caverns dark they fled.



Then soon the rain drops ceased;
Soft vapors from the Lake arose
And floated into twilight glow,
The sun burst forth in beauty
And tree and rock resplendent shone.
The Warrior Bold raced thru the storm----
In terror to the Lake he sped,
And when the surface of the Lake he scanned
Naught could he see.
His ALL was gone.
Then back with howling glee
The Evil Rival ran into his lair.----





"Oh! Give me back my love to life!"

The Lover leaned upon his lance;
Leaned long and gave no sign.
With hands outstretched
And brow uplifted high,
In prayer to the Spirit Great he plead,
"Oh! Give me back my love to life!"
And to these mighty supplications
Came the word:
"Go Westward to that mighty wall of rock
And beat it down.
To you long life I'll give to do the work----
Then to your arms your love will come."



He threw the lance and shield aside,
He bared his arm----his back was bent----
He wielded powerful blows that strained
The sinews of his mighty frame.
Ages upon ages passed----
And on he toiled.
When lo! The wall gave way,
The pent-up waters, rushing thru
The hewn-out channel, left the lake.
Then as he raised his eyes to gaze,
The Lovely Maiden rose with arms
Outstretched, and running,
Soon, was gathered to her lover's breast.





Their faces toward the setting sun
A' west----they went,

Their faces toward the setting sun
A' west----they went.
Where the rivers meet the mountains
Builded they their wigwams.
And now their children's children
Live, and tell the tale----
Of how the Wasco's tribe became
So mighty, wise and strong.
Where the Crooked River glides
To meet the purling Ochoco----
Where our own loved city stands
Slept the dusky MAID for ages----
In the "Heart of Oregon."



Myths: Miscellaneous Calif. references & bibliography

C. Hart Merriam
Papers
BANC MSS
80/18 c

INDIAN MYTH

Lewis & Clark Expedition

August 24, 1804.-Missouri River near White Stone River, (near Vermillion River) South Dakota.

Clark says: "In a northerley derection from the Mouth of this Creek in an emence Plain a high Hill is Situated, and appears of a Conic form, and by the different nations of Indians in this quarter is Suppose to be the residence of Deavels. that they are in human form with remarkable large heads, and about 18 Inches high, that they are very watchfull and are arm'd with Sharp arrows with which they Can Kill at a great distance; they are Said to kill all persons who are So hardy as to attempt to approach the hill; they State that tradition informs them that many Indians have Suffered by those little people, and among others three Mahar Men fell a sacrefise to their murceless fury not many Years Sence. So Much do the Maha, Soues, Ottoes and other neighbouring nations believe this fable, that no Consideration is Suffecient to induce them to approach the hill."

Original Journals of Lewis & Clark, Thwaites Ed., I. 119, 1904.

Myths

Zuñi fetiches & their myths.

Zuñi fetiches F. H. Cushing: Rept. Bur. Eth. for 1880-81: 9-45, 1883.
5

INDIAN MYTH (Ricaras)

Lewis & Clark Expedition

October 13, 1804.- ~~Missouri near~~ Missouri River nearly opposite ~~camp of Rickaras, Northern~~ Stone Idol Creek, which is about 30 miles above Rampart Creek, S. Dak. ~~South Dakota. (Stone Idol Creek).~~

Clark says: "Nearly opposit this Creek a fiew miles from the river on the S.S. 2 Stones resembling humane persons & one resembling a Dog is Situated in the open Prarie, to those Stones the Rickores pay Great reverance make offerings (votive Dress &c.) whenever they pass (Informt.ⁿ of the Chief & Intepeter) those People have a curious Tredition of those Stones, one was a man in Love, one a Girl whose parents would not let [them] marry (The man as is customary went off to mourn, the female followed.), the Dog went to morn with them all turned to Stone gradually, commenceing at the feet. Those people fed on grapes untill they turned, & the woman has a bunch of grapes yet in her hand, on the river near the place those are Said to be Situated, we obsd. a greater quantity of fine grapes than I ever Saw at one place."

Original Journals of Lewis & Clark, Thwaites Ed., I. 191, 1904.

Loc. Instr. very near northern boundary of S. Dakota - cam

INDIAN MYTH (Mandan)

Lewis & Clark Expedition

October 21, 1804.-Missouri River on Heart River, North Dakota.

Lewis says: "Some distance up this River is Situated a Stone which the Indians have great faith in & say they See painted on the Stone, all the Calemetes & good fortune to hapin the nation & parties who visit it. a tree [an oak] which Stands [alone] near this place [about 2 miles off] in the open prarie which has withstood the fire they pay Great respect to make Holes and tie Strings thro [the skins of their] their necks and around this tree to make them brave [Cap^{t}. Clarke saw this tree] (all this is the information of Too-ne [is a whipperwill] the Cheif of the Ricares who accompanied us to the Mandins)."

Original Journals of Lewis & Clark, Thwaites Ed., I. 201, 1904.

1c

INDIAN MYTH (MANDAN)

Lewis & Clark Expedition

November 12, 1804.-Fort Mandan, North Dakota.

Clark says: "The interpeter says that the Mandan nation as they (old men) Say came out of a Small lake (subterraneous Village & a lake) where they had Gardins." many years ago they lived in Several Villages on the Missourie low doron." 1/

1/ [Footnote.-] See Maximilian's detailed account of the Mandan myths of the creation, their tribal origin, and their migrations, with their religious beliefs, superstitions, and customs, in his Voyage, II, pp. 369-484.--Ed.

Original Journals of Lewis & Clark, Thwaites Ed., I. 220, 1904.

INDIAN MYTH (MANDAN)

Lewis & Clark Expedition

November 12, 1804.-Fort Mandan, North Dakota.

Clark says: "The interpeter says that the Mandan nation as they (old men) Say came out of a Small lake (subterraneous Village & a lake) where they had Gardins." Maney years ago they lived in Several Villages on the Missourie low down." †

† [Footnote.-] See Maximilian's detailed account of the Mandan myths of the creation, their tribal origin, and their migrations, with their religious beliefs, superstitions, and customs, in his Voyage, II, pp. 359-484.--Ed.

Original Journals of Lewis & Clark, Thwaites Ed., I. 220, 1904.

INDIAN MYTH (MANDAN)

1c

Lewis & Clark Expedition

February 20, 1805.-Fort Mandan, North Dakota.

Clark says: "I am informed of the Death of an old man whome I saw in the Mandan Village this man, informed me that he was 120 winters old, he requested his grand Children to Dress him after Death & Set him on a Stone on a hill with his face towards his old Village or Down the river, that he might go Streight to his brother at their old village under ground[1/2] I observed Several Mandans verry old chiefly men."

[2] [Footnote.-] Referring to the myth of their tribal origin, as having come from an underground region. For a minute account of this belief, written from the recital made by a prominent Mandan, see Prince Maximilian's Voyage, II, pp. 431-436.--Ed.

Original Journals of Lewis & Clark, Thwaites Ed., I. 263, 1904.

INDIAN MYTH (MANDAN)

Lewis & Clark Expedition

February 21, 1805.-Fort Mandan, North Dakota.

Clark says: "Visited by the big White & Big Man they informed me that Several men of their nation was gone to Consult their Medison Stone about 3 day march to the South West to know what was to be the result of the ensuing year. Thye have great confidence in this stone, and say that it informs them of every thing which is to happen, & visit it everry Spring & Sometimes in the Summer. 'They haveing arrived at the Stone give it smoke and proceed to the Wood at Some distance to Sleep the next morning return to the Stone, and find marks white & raised on the stone representing the peece or War which they are to meet with, and other changes, which they are to meet.' This stone has a leavel Surface of about 20 feet in Surcumfrance, thick and porus," and no doubt has Some mineral quallites effected by the Sun.[1]

The Big Bellies have a Stone to which they ascribe nearly the Same Virtues."

[1] [Footnote.-] See descriptions of this "medicine stone," and of the ceremonies with which the Indians invoked the spirit supposed to dwell there, in Long's Expedition, I, pp. 273, 274; and Maximilian's Voyage, II, pp. 459, 460. Both the Mandan and Minitaree were accustomed to consult these oracles; Matthews says of the latter (Ethnog. Hidatsa, p. 51): "The Hidatsa now seldom refer to it, and I do not think they ever visit it."--Ed.

Original Journals of Lewis & Clark, Thwaites Ed., I. 264, 1904.

C

INDIAN MYTH (ENEESHERS)

Lewis & Clark Expedition

April 19, 1806.-Columbia River ~~near Dalles~~ above the Long Narrows near The, Oregon - Wash. Boundary.

Clark says: "There was great joy with the nativs last night in consequence of the arrival of the Salmon; one of those fish was cought, this was the harbenger of good news to them. They informed us that those fish would arive in great quantities in the course of about 5 days. this fish was dressed and being divided into small pieces was given to each child in the village. this custom is founded on a supersticious opinion that it will hasten the arrival of the Salmon."

Original Journals of Lewis & Clark, Thwaites Ed., IV. 302, 1905.

INDIAN MYTH (MANDANS)

Lewis & Clark Expd., Thwaites Ed., V. 1905.

August 18, 1806.-Missouri River at mouth of Chiss-che-tor [now Big Heart] River, North Dakota.

Clark says: "The winds blew hard from the S.E. all day which re- 347
tarded our progress very much after the fires were made I set my self down with the bigwhite man Chiefe and made a number of enquiries into the tredition of his nation as well as the time of their inhabiting the numbrs of villages the remains of which we see on different parts of the river, as also the cause of their evacuation. he told me his nation first came out of the ground where they had a great village. a grape vine grew down through the Earth to their village and they Saw light Some of their people assended by the grape vine upon the earth, and saw Buffalow and every kind of animal also Grapes plumbs &c. they gathered some grapes & took down the vine to the village, and they tasted and found them good, and deturmined to go up and live upon earth, and great numbers climbed the vine and got upon earth men womin and children. at length a large big bellied woman in climbing broke the vine and fell and all that were left in the village below has remained there ever since (The Mandans beleive when they die that they return to this village) Those who were left on earth made a village on the river below and were very noumerous &c. he said that he was born [about 40 years] [ago] in the Village Opposit to our camp and at that time his nation inhabited 7 villages as large as that and were full of people, the Sieoux and Smallpox killed the greater part of them and made them so weak that all that were left only made two small villages when collected, which were built near the old Ricaras village above. their

troubles with the Seeoux & Pawnees or Ricaras Compelled them to move 347
and build a village where they now live. [Qu: The Village of the Mandans on the North East side was formed of two villages [who] formerly lived on the East side opposite the 7. War & Small pox reduced them to one vill which crossed & joined the 2 vill.s near ricaras haveing first settled (before the 7 came into 2) on East side | Then they moved with 348
the 2 to where they now live, so that the vill.e originally was of 9 vill.s (See Note)] he Said that the Menitarras Came out of the water to the East and came to this country and built a village near the mandans from whome they got corn beens &c. they were very noumerous and resided in one village a little above this place on the opposit side. they quarreled about a buffalow, and two bands left the village and went into the plains, (those two bands are now known bye the title Pounch, and Crow Indians.[2] the ballance of the Menetaras moved their village to where it now Stands where they have lived ever Since."

[1] [Footnote.-] Maximilian (op. cit.) gives a tradition similar to 347
this, which he says occurred after a great deluge.--Ed.

[2] On the relation between the Minitaree and the Crow, see our vol. 348
I, p. 130, note 2; p. 208, note 2.--Ed.

The following document is a duplicate of the preceding document. It may contain annotations and corrections not found on the original.

INDIAN MYTH

Lewis & Clark Expedition

August 24, 1804.-Missouri River near White Stone River, (near Vermillion River) South Dakota.

Clark says: "In a northerley derection from the Mouth of this Creek in an emence Plain a high Hill is Situated, and appears of a Conic form, and by the different nations of Indians in this quarter is Suppose to be the residence of Deavels. that they are in human form with remarkable large heads, and about 18 Inches high, that they are very watchfull and are arm'd with Sharp arrows with which they Can Kill at a great distance; they are Said to kill all persons who are So hardy as to attempt to approach the hill; they State that tradition informs them that many Indians have Suffered by those little people, and among others three Mahar Men fell a sacrefise to their murceless fury not many Years Sence. So Much do the Maha, Soues, Ottoes and other neighbouring nations believe this fable, that no Consideration is Suffecient to induce them to approach the hill."

Original Journals of Lewis & Clark, Thwaites Ed., I. 119, 1904.

INDIAN MYTH (Ricares)

Lewis & Clark Expedition

October 13, 1804.- ~~Missouri near camp of Rickaras, Northern South Dakota. (Stone Idol Creek).~~ Missouri River nearly opposite Stone Idol Creek, which is about 30 miles above the modern Rampart Creek, S. Dak.

Clark says: "Nearly opposit this Creek a fiew miles from the river on the S.S. 2 Stones resembling humane persons & one resembling a Dog is Situated in the open Prarie, to those Stones the Rickores pay Great reverance make offerings (votive Dress &c.) whenever they pass (Informt.n of the Chief & Intepeter) those People have a curious Tredition of those Stones, one was a man in Love, one a Girl whose parents would not let [them] marry (The man as is customary went off to mourn, the female followed.), the Dog went to morn with them all turned to Stone gradually, commenceing at the feet. Those people fed on grapes untill they turned, & the woman has a bunch of grapes yet in her hand, on the river near the place those are Said to be Situated, we obs.d a greater quantity of fine grapes than I ever Saw at one place."

Original Journals of Lewis & Clark, Thwaites Ed., I. 191, 1904.

INDIAN MYTH (Mandan)

Lewis & Clark Expedition

October 21, 1804.-Missouri River on Heart River, North Dakota.

Lewis says: "Some distance up this River is Situated a Stone which the Indians have great faith in & say they See painted on the Stone, all the Calemetes & good fortune to hapin the nation & parties who visit it. a tree [an oak] which Stands [alone] near this place [about 2 miles off] in the open prarie which has withstood the fire they pay Great respect to make Holes and tie Strings thro [the skins of their] their necks and around this tree to make them brave [Capt. Clarke saw this tree] (all this is the information of Toone [is a whipperwill] the Cheif of the Ricares who accompanied us to the Mandins\."

Original Journals of Lewis & Clark, Thwaites Ed., I. 201, 1904.

INDIAN MYTH (MANDAN)

Lewis & Clark Expedition

February 20, 1805.-Fort Mandan, North Dakota.

Clark says: "I am informed of the Death of an old man whome I saw in the Mandan Village this man, informed me that he was 120 winters old, he requested his grand Children to Dress him after Death & Set him on a Stone on a hill with his face towards his old Village or Down the river, that he might go Streight to his brother at their old village under ground[1/] I observed Several Mandans verry old chiefly men."

[1/] [Footnote.-] Referring to the myth of their tribal origin, as having come from an underground region. For a minute account of this belief, written from the recital made by a prominent Mandan, see Prince Maximilian's Voyage, II, pp. 431-436.--Ed.

Original Journals of Lewis & Clark, Thwaites Ed., I. 263, 1904.

INDIAN MYTH (MANDAN)

Lewis & Clark Expedition

February 21, 1805.-Fort Mandan, North Dakota.

Clark says: "Visited by the big White & Big Man they informed me that Several men of their nation was gone to Consult their Medison Stone about 3 day march to the South West to know what was to be the result of the ensuing year. Thye have great confidence in this stone, and say that it informs them of every thing which is to happen, & visit it everry Spring & Sometimes in the Summer. 'They haveing arrived at the Stone give it smoke and proceed to the Wood at Some distance to Sleep the next morning return to the Stone, and find marks white & raised on the stone representing the peece or War which they are to meet with, and other changes, which they are to meet.' This stone has a leavel Surface of about 20 feet in Surcumfrance, thick and porus," and no doubt has Some mineral quallites effected by the Sun.[1]

The Big Bellies have a Stone to which they ascribe nearly the Same Virtues."

[1] [Footnote.-] See descriptions of this "medicine stone," and of the ceremonies with which the Indians invoked the spirit supposed to dwell there, in Long's Expedition, I, pp. 273, 274; and Maximilian's Voyage, II, pp. 459, 460. Both the Mandan and Minitaree were accustomed to consult these oracles; Matthews says of the latter (Ethnog. Hidatsa, p. 51): "The Hidatsa now seldom refer to it, and I do not think they ever visit it."--Ed.

Original Journals of Lewis & Clark, Thwaites Ed., I. 264, 1904.

INDIAN MYTH (MANDANS)

Lewis & Clark Expd., Thwaites Ed., V. 1905.

August 18, 1806.-Missouri River at mouth of Chiss-che-tor [now Big Heart] River, North Dakota.

Clark says: "The winds blew hard from the S.E. all day which re- 347
tarded our progress very much after the fires were made I set my self down with the bigwhite man Chiefe and made a number of enquiries into the tredition, of villages the remains of which we see on different parts of the river, as also the cause of their evacuation. he told me his nation first came out of the ground where they had a great village. a grape vine grew down through the Earth to their village and they Saw light Some of their people assended by the grape vine upon the earth, and saw Buffalow and every kind of animal also Grapes plumbs &c. they gathered some grapes & took down the vine to the village, and they tasted and found them good, and deturmined to go up and live upon earth, and great numbers climbed the vine and got upon earth men womin and children. at length a large big bellied woman in climbing broke the vine and fell and all that were left in the village below has remained there ever since (The Mandans beleive when they die that they return to this village) ↙ Those who were left on earth made a village on the river below and were very noumerous &c. he said that he was born [about 40 years] [ago] in the Village Opposit to our camp and at that time his nation inhabited 7 villages as large as that and were full of people, the Sieoux and Smallpox killed the greater part of them and made them so weak that all that were left only made two small villages when collected, which were built near the old Ricaras village above. their

troubles with the Seeoux & Pawnees or Ricaras, Compelled them to move 347
and build a village where they now live. [Qu: The Village of the
Mandans on the North East side was formed of two villages [who] formerly
lived on the East side opposite the 7. War & Small pox reduced them to
one vill which crossed & joined the 2 vill.s near ricaras haveing first
settled (before the 7 came into 2) on East side | Then they moved with 348
the 2 to where they now live, so that the villg originally was of 9
vills (See Note)] he Said that the Menitarras Came out of the water
to the East and came to this country and built a village near the man-
dans from whome they got corn beens &c. they were very noumerous and
resided in one village a little above this place on the opposit side.
they quarreled about a buffalow, and two bands left the village and
went into the plains, (those two bands are now known bye the title
Pounch, and Crow Indians.[2] the ballance of the Menetaras moved their
village to where it now Stands where they have lived ever Since."

[1] [Footnote.-] Maximilian (op. cit.) gives a tradition similar to 347
this, which he says occurred after a great deluge.--Ed.

[2] On the relation between the Minitaree and the Crow, see our vol. 348
I, p. 130, note 2; p. 208, note 2.--Ed.

INDIAN MYTH (ENEESHERS)

Lewis & Clark Expedition

April 19, 1806.-Columbia River ~~near Dalles~~ above the Long Narrows, near the Dalles, Oregon-Wash. Boundary

Clark says: "There was great joy with the nativs last night in consequence of the arrival of the Salmon; one of those fish was cought, this was the harbenger of good news to them. They informed us that those fish would arive in great quantities in the course of about 5 days. this fish was dressed and being divided into small pieces was given to each child in the village. this custom is founded on a supersticious opinion that it will hasten the arrival of the Salmon."

Original Journals of Lewis & Clark, Thwaites Ed., IV. 302, 1905.

Natural History - Vol. 21, No. 4. August 1921.

SPIDER MYTHS OF THE AMERICAN INDIANS*

IN THE mythology of the American Indians spiders played a rôle that stands in sharp contrast to the attitude of indifference or even repulsion with which the average white man views these interesting creatures. In recognition possibly of the wizardry whereby many spiders spin out of silk supplied by their own bodies the complicated structures with which we are all familiar, certain tribes assigned to the spider a prominent place in their creation myths.

Thus, according to the Sia, there was in the beginning only one being in the whole world, a spider. This spider was the possessor, however, of two little packages from each of which there evolved, in response to his singing, a woman. He continued singing and, as he sang, the world became peopled; animals and birds and all animate things made their appearance. The two women first created were the mothers of all men. From one of them are descended the Indians, from the other the remaining races of the world. The spider also created the cloud, the lightning and thunder, and the rainbow people to serve the people of earth.

Scarcely less important is the rôle played by the spider in the creation myth of the Pima. According to these people a being by the name of "earth doctor" created the world from a little dust, which he took from his breast and flattened into a cake. On this he danced and as he danced, sang. The great world expanded under his feet. This earth doctor made the sky, shaped like the round house of the Pimas, to cover his creation, but the earth shook and stretched, with the result that the sky no longer fitted the thing it was supposed to enclose. Thereupon earth doctor created a gray spider and entrusted to this creature the task of webbing together the ill-adjusted parts of sky and earth. When this task was performed, the earth grew firm and stable.

According to the creation myth of the San Carlos Apache, the big black spider, along with black metal old man, black whirlwind, and mirage, was a primordially existing being. In this myth black whirlwind rubs his hands over his breast and removes some of the cuticle, from which the earth is subsequently made, an action reminiscent of that of the Pima's earth doctor.

Picturesque is the story which the Apache tell of Naiyenzgani, the child of a woman impregnated by a ray of the sun. This youth one time set out in search of his father, the great luminary. As he was going along toward dusk, a spider spun its thread across his path and tripped him. He arose, only to fall again. He was about to persevere in his attempt when he saw, only a few inches away, the head of spider-old-woman projecting from a hole. She succeeded in persuading him to enter her house, and from the cloth which he carried attached to his shirt, she made clothing for the naked spider-girls within. We have here an unconscious forecast of the utilization of spider-silk as a textile, a subject discussed in another article of this issue. The spider-woman is undoubtedly looked upon by the Apache as the inventor of all textile art. Among the Shoshoni the spider was regarded as the first weaver, and as having imparted its accomplishment to the fathers.

The tradition of the spider-woman is fairly widespread in the Southwest—all of the Indian tribes mentioned thus far belong to this region, though some, like the Shoshoni, extend beyond it. She is spoken of at times as the mother, at times as the grandmother of the twin war gods, the children of the sun. The tradition is apparently of considerable antiquity. Among the pottery dug up at Homolobi, one of the early sites of the Hopi, was a food bowl, on the inside of which was designed a spider and on the outside, a

*The writer is indebted to Dr. Clark Wissler, curator of anthropology, and to Dr. P. E. Goddard, curator of ethnology, American Museum, for valuable suggestions in connection with the preparation of this article.

SPIDER SILK AND ITS USES

BY

ALEXANDER PETRUNKEVITCH*

IN ADDITION to being of service to man as destroyers of injurious insects, spiders furnish the silk used in telescopes and various other optical instruments of precision to indicate by cross lines points in the field of vision The thinly spun but strong silk is particularly adaptable for representing fine lines of this character. The attempt has been made from time to time to utilize spider silk for textiles. About 200 years ago, in France, M. Le Bon obtained spider silk which was subsequently woven into gloves and stockings. This attempt, however, did not result in the establishment of the industry. Réaumur, appointed by the French Academy to investigate the matter, was not hopeful regarding the results to be obtained. One of the difficulties encountered in rearing spiders is that they require insect food, not easily supplied under artificial conditions, and a second difficulty is the impossibility of suppressing their cannibalistic tendencies. Dr. Petrunkevitch's article indicates, however, that formidable as are the obstacles, in one part of the world at least, the attempt to produce spider silk for textile uses has not been abandoned.—THE EDITOR.

FOR many years past the spider silk industry of Madagascar has been mentioned off and on. According to reports the spinner is a species of the genus *Nephila*, a close relative of *Nephila plumipes* of the Southern United States, Bermuda, and tropical America in general, and of *Nephila maculata* of the East. The females alone are employed in the industry, as the males are very small and do not produce silk of sufficient strength or in sufficient quantity. The creatures are kept in special gardens, taken from their webs at regular intervals, placed in special racks and allowed to furnish a certain length of silk thread, which is simply drawn from the spider's spinnerets and wound on a reel. After the performance the spiders are released and allowed to recuperate their health in the garden, as experience has shown that excessive production of silk exhausts them to the point of complete collapse.

The silk produced by this spider is finer, lighter, and stronger than silk derived from the silkworm. Consequently it is also considerably better than artificial silk now so common in the United States. There can be no doubt whatsoever that spider silk would become very popular if its price could compare favorably with the other two kinds of silk. Unfortunately it is exactly this side of spider silk production which makes it unprofitable under usual conditions and makes the spider silk itself an article of luxury. Silkworm culture is not only practicable in the temperate zone of all countries, but has been made possible even in such cold countries as Finland, through the substitution of another food plant for the mulberry. On the other hand, *Nephila* is a distinctly southern genus of spiders and like all spiders requires animal food in the shape of live insects. Breeding of spiders in captivity has never been accomplished with success and even should this ever become possible, labor conditions will counteract advantages derived from transplanting the industry to civilized centers of the temperate zone. Spider silk production will therefore remain a tropical or subtropical industry and then only in countries with comparatively cheap labor. And as long as artificial silk produced from the cheapest vegetable material is satisfactory, common mortals will hardly be tempted to pay more for something that is in no way better looking even though undoubtedly of higher quality.

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figure of the sun, tending to show that even at that early day the legend of the spider-woman's impregnation by the sun had currency. The spider-woman is an earth goddess; and as the medicine power of the sun presents itself to the Hopi as an eagle, so that of the earth is visualized as a spider.

The embodiment of the spider in Indian mythology is, however, by no means restricted to the Southwest. One of the most spirited legends in which the spider appears is related by the Mohawks. According to this legend, the spider was one of four animals that joined in an adventure to capture the sun, the absence of which had brought darkness upon the world. The sun was espied lying in a tree and the problem presented itself of dislodging it from that place of security. The beaver, one of the members of the party, began gnawing at the base of the trunk, while the spider climbed up and fastened a cord to the top, thereupon descending. When the beaver's whittling had made such headway that the tree could be felled, the spider gave a tug at the cord and down came the tree, catapulting the sun from the leafy retreat. The two animals were, however, deprived of the fruits of their toil, for the hare, another member of the party, seized the sun and bounded off with it. When finally the sun was recovered, the wise decision was reached that it should be the exclusive property of no one but should shine for the benefit of all, and accordingly the sun was hurled up into the sky to begin the journey that it has since faithfully continued.

Knowing how frail, though elastic, is the thin thread of silk that the spider spins, one marvels at the imperviousness to strain with which the imagination of the Indian occasionally endowed it. According to a myth of the Seneca, a certain web woven by a spider across a ball ground was sufficiently resistant to make a lacrosse ball rebound when striking it. According to another myth of the same people, a youth, beguiled into sleeping by the daughter of an enchantress, was borne away by her and left in isolation on a narrow cliff, from which there was seemingly no escape. Above rose a mountain precipitously to a dizzy height, below there was a sheer drop of many hundreds of feet. Similarly placed on other cliffs were youths like himself, some appearing half dead. They had all been victimized by women. Their flesh was being eaten from their bones, and yet they did not die. How was he to escape this lingering torture? Suddenly he remembered that in a dream a spider at one time had offered to aid him should he be in peril. He called upon the spider to fulfill its promise now, and presently, to his intense relief, an enormous spider, large as a man, began to weave a rope, which it let down from the mountain above. This rope was strong enough to support the man; he climbed it to safety and then, with the aid of the spider, rescued one after another the poor wretches who had shared his fate. A legend very similar occurs among the same people. Instead of being exposed upon an isolated cliff, however, the young man is pushed by an old man into the deep hole of a hollow tree trunk, filled with the moldering remains of those who have suffered a like fate. The spider invoked in this tale shows the same alacrity in coming to the rescue but unfortunately the woven ladder which is let down into the tree proves of less resistant fiber than the rope supplied to the victim of the cliff, with the result that before the young man has climbed more than half way, the ladder breaks, precipitating him to the depths from which he sought escape.

According to a tale told by the Arawak, it is not the ascent but the descent that through the aid of spiders is made easy for an escaping Indian. This people tell of a hunter who had captured a vulture—but it was no ordinary vulture, for presently the bird laid aside

its feathers and appeared before him as a beautiful girl, who became his wife and bore him aloft above the clouds. For a time all went well. In spite of the attractions of his new surroundings, however, the hunter still felt a loyalty toward those from whom he had been so unexpectedly separated and in time he expressed a wish to revisit his aged mother. This natural request occasioned a most unnatural resentment. The hunter was expelled from the regions above and placed on top of a very high tree abristle with prickly growths. He appealed to the animals to aid him and presently spiders spun cords to make possible his descent.

A beautiful myth prevalent among many Algonkin tribes and the Indians of the Plains is that of the woman who wished the Morning Star for a husband and was taken to the sky. In course of time she fell from grace and was sent back to earth, a spider being delegated to let her down by his web. Among the Plains Indians, especially the Sioux, the web is a symbol of the sky. Its four corners are the four world quarters where the thunders live.

Perhaps a Warrau legend offers the highest testimonial to the resistant quality of spider silk. According to this legend, a woman sought escape from jaguars by climbing with her baby into the branches of a high manicole tree. The ravenous beasts, not to be deprived of their prey, dug fiercely at the roots, loosening the tree's foundations until finally it swayed and fell over. Fortunately, however, its descent was stayed by a huge spider web, in which the woman and her child were caught. The woman's father, a celebrated *piai*, apprised of her misfortune through a dream, found her thus suspended when he went out to search for her.

The Cherokee have a pretty myth regarding the spider, to whom they assign a Promethean rôle. In the beginning there was no fire and the world was cold. In time, however, the thunders placed fire in a hollow tree located on an island. The animals gazed enviously at the smoke that curled upward from this concealed bonfire, knowing that there was warmth and yet at a loss how to obtain it; so they held a council and as a result the raven set out on the quest. He reached the island and the tree, but all that he bore back with him as a result of his adventure was his blackened feathers, which signalize the scorching to which he was exposed. The little screech owl next made the trial. He reached the tree as did the raven but while he was hesitating what to do next, a blast of fiery air arose from the furnace below and nearly burned out his eyes, which are red to this day. Other owls tried in their turn but with no better success; the black snake bears today a covering of sooty scales as a badge of his ineffectual hardihood.

Daunted by the failure of their fellows, the remaining animals managed to find the weightiest of reasons for not venturing to go. Not so the spider, however. She wove a little *tusti*-bowl of her silk and fastened it to her back and set forth on her adventure. She crossed the waters, being capable of running along their surface and of diving into their depths, reached the island, and crept through the grass to the tree. She snatched up a little ember of fire, placed it in her bowl, and returned to the expectant animals.

It would be hard to say what species of spider deserves the credit for this accomplishment. The little *tusti*-bowl attached to the back of the spider suggests one of the *Lycosa* that drag about with them their egg sac attached to the spinnerets. The species *Lycosa riparia* has a range southward of the District of Columbia, which would bring it into the territory of the Cherokee. "It is," quoting Hentz, "aquatic in its habits, always found near or on water, and diving with ease under the surface when threatened or pursued." Whether this be the spider referred to or not, the attribution of the adventure to *Argyroneta*[1] is almost certainly wrong, for *Argyroneta* is a European and Asiatic genus without an American representative.

Not always is the rôle of the spider a beneficent one. According to a Pima legend Morning Green, Chief of Casa Grande, was one time entertaining Chief Tcernatssing and his women. While a dance was in progress in which the women of Casa Grande and the visitors participated, Tcernatssing sang a magic song, enticing all the women to follow him. Morning Green strove in vain to counteract the strength of his magic. Among those whose going he was powerless to prevent was his own wife. To increase the irritation of the deserted chief, his daughter married Tcernatssing and in time gave birth to a son. Then, Morning Green, bent on revenge, sent a spider to inflict a mortal wound on the child. When, however, the boy was at the point of death, Morning Green relented and sent an herb powerful enough to avert the tragedy he had almost compassed.

Lest some one infer from this that the bites of spiders are prevailingly of serious character, it should be added that this episode took place in the Southwest, where the tarantula is found. Northern spiders are practically harmless, as Mr. Savin points out in his article in this issue of NATURAL HISTORY. A possibly injurious southern spider, *Latrodectus mactans*, occasionally reported from northern localities, is so rare in this region that it is negligible.

The Zuñi tell how "old tarantula" entered into conversation with a handsomely dressed youth and asked him whether he would not like to see just how splendid he appeared. To this end the crafty old tarantula persuaded the youth, whose vanity had been aroused, to divest himself of his finery, even to the inclusion of his turquoise earrings and his anklets of sacred white shell, and then himself donned the raiment. "Look at me now. How do I look?" asked the spider as he displayed the garments. The youth, finding the ugliness of the wearer somewhat detrimental to the appearance of the clothes, was not greatly impressed. The spider moved off a bit and, as distance lends enchantment or at least makes repulsiveness less obtrusive, the youth noted an improvement. Still a little farther off moved the spider, pretending that his only object was to gain the youth's approbation, but really intent on getting nearer and nearer to his burrow. At last he had arrived at the entrance. "How do I look now?" asked the wily creature. "Perfectly handsome," replied the youth, but as he spoke, the spider dived into the earth with the stolen finery.

The spider is frequently invoked in the formulas of the Cherokee conjurors to ensnare the souls of those whom they would bring under their evil spells.

One might recount many another myth that has grown up around the spider, tending to show what an exalted place for good or for evil—though mostly, be it said, for good—this creature occupies in the folklore of the Indian. Suffice it to say in closing, that even when treading on a spider, certain Indians will do so only after rather reverent preliminaries. It is said, for instance, of the Teton, one of the tribes of the Sioux, that when a spider crosses their path, they do not kill it in silence. Either to let it escape or to kill it without prayer would bring evil. In the latter case another spider would avenge its death. To forestall such disaster, it is necessary before bringing down one's foot to say, "The thunder beings kill you." The thunder beings enjoy immunity and through thus vicariously making them responsible for the spider's death, the real culprit escapes the punishment that would otherwise be meted out to him.

H. F. S.

[1] Nineteenth Annual Report of Bureau of Ethnology, Vol. I, page 431.

Cahuilla creation myth

compare Waterman's summary of Luiseño (cc) in Am. Anthrop. XI, 41-55, 1909 (especially top of p. 45 – cross)

Sky (man): Tukmit, Tukmish, Tukomit, Tucomish, Tuqesh.

In Luiseño: Earth (woman): Tamaiovit, Tanowish, Tamaiovot

CAHUILLA TALES

"The following brief outlines of traditions of (239) the Cahuilla Indians of the Colorado desert may be of interest, inasmuch as no myths or tales of these people seem to have been published.

"The Shooting Star.--Takwich, the Shooting-Star, living on Mount San Jacinto, once carried off a bathing woman. He kept her one year, but when she became homesick, allowed her to return, on condition that for one year after her arrival she would not tell where she had been. On reaching her home, however, the woman did not wait for the expiration of the year, told her story, and died.

"A Visit to the Sun.--A number of men went westward until they reached the ocean. Then they began to swim. They became very thirsty and drank salt water. Thereupon all of them died except three. The ocean told them a charm which they could pronounce and then drink salt water without evil effects. These three men finally reached the shore on the other side. Here the Sun lived. By the Sun's house stood a tall pine. Every day the Sun climbed this. When he reached the top, it was noon. As the Sun descended, the pine burned, but grew up again during the night. Something that the Sun carried made the difference of the seasons. The three men stayed here.

They were told not to look into certain pottery jars. (240)
One of them, however, did so, whereupon men leaped from the jars and killed him. The two survivors were told not to go to another house in this place where the moon lived. Nevertheless one of them went to this house. An old woman spoke to him and he died. The single survivor now wished to return home. He was blown back across the ocean by the wind, after having been instructed by the Sun not to tell for one year after his arrival his experiences. Back among his own people, the man was, however, pressed by them to relate what had happened to him. One night he yielded and told, but when the sun rose he died.

Valley Center, Cal. David J. Woosley."

Journ. Am. Folk-Lore, Vol. XXI, pp. 239-240, 1908.

MYTHS OF THE "WIYOT" TERRITORY

L. L. Loud relates several Wiyot and Athapascan myths in his publication,

Ethnogeography & Archaeology of the Wiyot Territory, Univ. Calif. Pubs. in Am. Arch. & Ethn., Vol. 14, pp. 281-282, 282, 283, 284, 1918.

--M.P.de Lucy-Fossarieu, Les Langues Indiennes de la Californie, 13 footnote, 1881.

"Padre Juan Comellas mentions a singular legend current among several tribes. They have received from their ancestors a tradition according to which there should have come formerly to their country a woman whom they call 'the Father with the breasts', for, they say, she wore the same costume as the Padre and had a large bosom. She preached among them announcing that before long the white men would come to teach them the way to heaven and to free them from their ignorance and barbarism. She charged the Indians to have no fear of these men for they would do them no harm, and to believe all that they told them.

This tradition contributed not a little to preparing the natives for the Padres and to their embracing the Christian religion so easily.

According to the missionary from whom we borrow this legend, the woman who must have given rise to the tradition would be the venerable mother Maria de Jesus Agreda."

[Free translation.]

THE SUN THE MOTHER OF THE YUCHIS

Gatschet tells us that: "The Yuchis believe themselves to be the offspring of the Sun, which they consider to be a female."
--American Anthropologist, Vol. 6,No. 3, July 1893.

The Sacramento Daily Democratic State Journal,, Nov. 7, 1855 publishes the following:

"We learn from a friend residing up the coast that Diggers of that region imagine that an eclipse of the moon is occasioned by the crows attempting to pick pale Cynthia's face to pieces--accordingly they set up a most hideous howling to scare away these dark marauders from their prey, and as soon as the veil is removed, and the queen of night shines forth with her accustomed radiance, they imagine they have succeeded in their efforts, and crow over the feat prodigiously."--Sacramento Daily Democratic State Journal, Nov. 7, 1855.

CUPEÑO MYTHS

E. W. Gifford, Clans & Moieties in Southern California, Univ. Calif. Pubs. in Am. Arch. & Ethn., Vol. 14, pp. 192, 199-201. 1918.

A WASHOO MYTH:

The Spiritts Lodge. A legend of Lake Bigler. Hutchings' California Magazine, Vol. 2, No. 8, pp. 356-358, February 1858.

Humboldt River called <u>Tro-ko-nene</u>.

DIEGUEÑO MYTHS

E. W. Gifford, Clans & Moieties in Southern California, Univ. Calif. Pubs. in Am. Arch. & Ethn., Vol. 14, pp. 170-172, 1918.

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THE WIND DEITY

In Dixon's 'Maidu Texts' one of the myths tells of an early personage or divinity who was much troubled by the evil winds. He said: "I have come from afar to this country, for I do not like to see these bad winds blowing about. The Wind-Man is a bad man, one who carries much sickness; and if he blows upon mortal men, they will be very ill. So I was going to stop this Wind-Man. The Wind-Man carries many weaknesses, he carries many coughs and colds, carries many sicknesses of all kinds. The Wind-Man carries very cold winds; and when they begin to blow in this country, mortal men can hardly see the ground. That is the kind he is. I do not want to see him do that way. The Wind-Man carries great sickness."

Roland B. Dixon, Maidu Texts, Vol. 4 Pubs. Am. Ethn. Soc., p. 130, 1912.

Duflot de Mofras, 1840-1842, in his general remarks on the Indians of California, relates a creation myth which tells that after all existing things was "an animated being named Oïot [=We´-yot]. This Oïot begot a great number of children, of which he was the father and chief," and as his family increased the earth grew to the N and S. Tells of the coming of Chingchinig. The Great Being said to them, "He who believes not in me and who does not obey me, shall be severely chastised; I will make him to be torn by vipers and devoured by bears."

--Duflot de Mofras, Exploration du Territoire de l'Oregon, II, 364-366, 1844.

K A I L T A S

Belief regarding the departure of the soul from the body and its abode.

Bancroft, Native Races, Vol. III, pp. 133-134, 1875.

ÁLLEQUAS

Belief in and conception of future state.

Bancroft, Native Races, III, p. 525, 1875.

Mythology

CALIFORNIA INDIANS

Information regarding the mythology relating to the origin and end of things as held by various California tribes is scattered through the pages of Bancroft, Native Races, Vol. III, pp. 83-93, 1875.

158-169.

Belief in future state of the

Meewocs (p. 522)
Tolewahs (p. 524)
Modocs (p. 524)
Ukiahs (p. 524)
Sanéls (p. 524)

Classification of languages.

Ibid, pp. 565-567.

M Y T H S

CLEAR LAKE, CALIF.

L.L.Palmer, in his History of Lake Co., reprints a sketch which appeared in the San Francisco Post in July 1877, including a Clear Lake myth regarding the combat between two divinities--Boronbega, keeper of the waters, and Boswellia, keeper of the forests.

--L.L.Palmer, in Hist.of Napa and Lake Counties, Calif., Slocum, Bowen & Co., p.93 (of Lake Co.), 1881.

M Y T H S

LAKE CO., CALIF.

In the historical sketch of Lake Co., Calif., by L.L.Palmer, is an Indian legend concerning the upper two Blue Lakes. White fawn, goddess of purity and innocence, was killed by evil spirit who assumed form of sea serpent and hid in lake. Since then no Indian has camped on shores nor fished in waters.

--L.L.Palmer, in Hist. of Napa and Lake Counties, Calif., Slocum, Bowen & Co., pp.209-210 (of Lake Co.), 1881.

TRADITION

INDIANS OF COLUSA CO.

[Colusa Co. Indians]

"The tradition of a flood was strong among them. In some [p.28] great catyclysm the whole earth had been submerged, drowning every living thing except a mud-turtle and a hawk. These two survivors of the flood met and kept together in strange comradeship, when the hawk tied a cord to the turtle, who, descending beneath the abyss of water, brought up mud. It continued this diving process for a long period of time, bringing up the mud and piling it on the tules, or swamp reeds, till the land soared high above their light vegetable raft, forming what is now known as Butte Mountain. Here a few alders grew, and out of pieces thereof these dual powers of creative omnipotence formed the first pair of Indians, male and female, from whom were descended the afterwards numerous 'Diggers', who lived in primitive abundance and contentment before the advent of the pale-face."

—Justus H. Rogers: Colusa Co. History, 27-28, 1891.

Kahrok

CAHROCS

Mythology and traditions.

Bancroft, Native Races, Vol. III, pp. 90, 115, 117, 137-139, 159-161, 524, 1875.

Sweathouse and medical treatment

Ibid, pp. 160-161.

Luiseno

A C A G C H E M E M S

(Located in the valley and neighborhood of San Juan Capistrano, Calif.)

Mythology, faith, and worship.

Bancroft, Native Races, III, pp. 162-168, 1875.

Belief in future state.

Ibid, 525.

Belief in Spirits and Monsters among the Luiseño Indians. Sparkman: Culture of Luiseño Indians. Univ.Calif.Pubs.Am.Arch. & Ethn. Vol.8, 219-220, Aug.7, 1908.

"A tradition recorded by Mr.Sparkman regarding the pavawut [water-spirit] has been published in the Journal of American Folk-Lore, XXI, 35, 1908." Sparkman: Culture of Luiseño Indians. Univ.Calif.Pubs.Am.Arch. & Ethn. Vol.8, 220 ft.note, Aug.7, 1908.

POTOYANTES

Mythology of origin and end of things.

Bancroft, Native Races, Vol. III, pp. 87-88, 1875.

M Y T H S.

POTOYANTE TRIBE, YOKUT

Adam Johnston, in Schoolcraft IV, gives the creation myth of the Po-to-yan-te tribe, as told him by the chief.

--Adam Johnston, in Schoolcraft, Indian Tribes, IV, 224-225, 1854.

--M.P.de Lucy-Fossarieu, Les Langues Indiennes de la Californie, 13 footnote, 1881.

"Padre Juan Comellas mentions a singular legend current among several tribes. They have received from their ancestors a tradition according to which there should have come formerly to their country a woman whom they call 'the Father with the breasts', for, they say, she were the same costume as the Padre and had a large bosom. She preached among them announcing that before long the white men would come to teach them the way to heaven and to free them from their ignorance and barbarism. She charged the Indians to have no fear of these men for they would do them no harm, and to believe all that they told them.

This tradition contributed not a little to preparing the natives for the Padres and to their embracing the Christian religion so easily.

According to the missionary from whom we borrow this legend, the woman who must have given rise to the tradition would be the venerable mother Maria de Jesus Agreda."

[Free translation.]

A LUISENO TALE by P. S. Sparkman.

Jour. Am. Folk-Lore XXI, No. 80, Jan.-March, pp. 35-36, 1908.

WIYOT FOLK-LORE by A. L. Kroeber.

Jour. Am. Fold-Lore XXI, No. 80, Jan.-March, pp. 37-39, 1908.

WIYOT FOLK-LORE by A. L. Kroeber.

Jour. Am. Fold-Lore XXI, No. 80, Jan.-March, pp. 37-39, 1908.

K L A M A T H S

MYTHS

J.W.Powell. Notice of J.Curtin's work in collecting Klamath myths.— 6th Ann.Rept.Bur.Eth. for 1884-85. xxxviii, 1888.

WATER MONSTERS IN NORTHERN CALIFORNIA by R. B. Dixon

Jour. Am. Folk-Lore XIX, Oct.-Dec. p. 323, 1906.

Wintun and Chimariko

Shasta

M O'D O C S

MYTHS:

J.W.Powell. Notice of A.S.Gatschet's collection of myths from Modoc exiles at Quapaw Agency, Ind.Terr. -- 6th Ann.Rept.Bur.Eth. for 1884-85; xxxvi, 1888.

MODOCS

MYTHS:

J.W.Powell. Notice of J.Curtin's collection of myths from Modoc exiles at Quapaw Agency, Ind.Terr.-- 6th Ann.Rept.Bur.Eth. for 1884-85: xxxvii, 1888.

.M'Y T H S

MODOC:

J.W.Powell. Notice of J. Curtin's collection of ~~for~~ Modoc myths.-- 5th Ann. Rept.Bur. Eth. for 1883-84: xxxi, 1887.

M Y T H S

CALIFORNIA INDIANS:

J.W.Powell. Notice of work done by J.Curtin in collecting and arranging myths and vocabularies of California Indians, 1889-90.--- 11th Ann. Rept.Bur.Eth.for 1889-90: xxix-xxx, xxxiii, 1894.

Weitspekan, Quoratean } Klamath river, from Orleans Bar to Martin Ferry, Humbolt county.

Wishoskan...Blue lake & Arcata, Humboldt county.

Yukian, Palaihnihan } Round Valley, Mendocino county.

Suisun, Mariposan, Costanoan } Niles, Alameda county.

Palaihnihan... Redding, Shasta county.

SAME, CONTINUED: Hupa, Ehnikan, Wintu Indians.---

In 12th Ann.R ept.Bur.Eth.for 1890-91: xxxvii, 1894.

Journ. Wash. Acad. Sci. VII, no. 9, 275, May 4, 1917.

and physical type the people are much alike, but there most of the similarity ends.

A Bontoc village is divided into *ato* or political divisions each one of which is governed by an oligarchy of old men. The leaders of the various *ato* meet from time to time to decide matters of importance to the village. These *ato* are also exogamic divisions of the settlement and each has its man's house in which all unmarried men and boys must sleep. It also serves as a council house and as the storage place for drums and other ceremonial paraphernalia. Here also are kept the skulls of enemies. Unmarried girls sleep in the *olag* or girls' house from the age of about four years until their marriage. Trial marriage is common, a final union seldom taking place until the birth of a child is assured.

Going to the Tinguian a radically different type of house construction is encountered. The villages are not divided into political or exogamic groups; the man's house and the girls' dormitory are not found, nor is trial marriage practiced. The government of the village is in the hands of a head man known as *lakay*, who may if he desires call in other old men to aid him in the decision of important matters.

Dr. Cole ended his talk with a somewhat detailed description of the religious beliefs of the Tinguian; the possession of their mediums by the spirits; and the ceremonies conducted to bring health and prosperity to the group.

About one hundred colored lantern slides were used in illustration.

The 510th meeting of the Society was held at the Natural History Building of the National Museum, April 3, 1917. At this meeting LEO J. FRACHTENBERG, of the Bureau of American Ethnology, presented a paper on *The religious ideas of the Northwest Coast Indians.*

Dr. Frachtenberg stated that four important features of the religious ideas noted among the Indians of this region are: (1) An intensive animism; (2) a belief in the powers of supernatural beings as dwarfs and giants; (3) a belief in the existence of guardian spirits; (4) a complete absence of the social phase of religion.

According to Dr. Frachtenberg many religious ideas are common to all the tribes of the Northwest Coast, yet the northern and southern portions of this area are found to differ in cosmogony. The tribes in the extreme southern portion believe that the world was created out of a watery mist, the Transformer enlarging a small piece of land until it became large enough for habitation. The tribes of the northern portion are satisfied with a world whose origin is not explained. They hold, however, that the Transformer (Creator) first made man and the members of faunal and floral kingdoms, and at a later time returned and improved this creation. Two visits of the Transformer are typical of this region. In the south the Transformer (Creator) and the Trickster are separate individuals, while in the north they are unified. In the south the Transformer makes all that is good, and the Trickster is held responsible for all the bad elements; while in the

north there is no such dissociation. Good and evil things were alike created by the Transformer.

The Northwest Coast Indians believe that an individual comprises a body inhabited by two "souls" and a "ghost." In a slight illness the "outer soul" becomes separated from the body, in a serious illness the "inner soul" wanders to the "country of souls" but may be recalled by the shaman. When death occurs the "ghost" also departs and the shaman has no further power. The "country of souls" contains two division, one inhabited by recently arrived souls, the other by souls which have been there for a longer time. On their journey to this land the souls pass a "rest-house," then a "lake" and a "berry-ground." Their way is barred by a "spring-pole," and they must cross a "rotten log," the final barrier being a wide river.

No ritual or systematic form of supplication is found among these Indians, indeed it may be said that guardian spirits take the place of deities. Every man and woman possesses one or more guardian spirits each of which has its special sphere of influence. Thus there are guardian spirits for securing good weather and plenty of seal or whale, guardian spirits for success in hunting, and for help in making baskets and canoes. No offerings accompany a request to a guardian spirit. Crude representations of these spirits are seen on the implements and on the house-posts of their owners.

The shamans receive their power from a multitude of spirits. Certain shamans are considered to have power to cure sickness, while it is believed that others can "steal a man's soul," causing either serious illness or death. Large gifts are exacted by the shamans, who are both respected and feared.

In the discussion which followed the reading of the paper Dr. J. R. SWANTON called attention to the nascent dualism and monism in the religious beliefs of the Indians of the southern and northern areas considered by the speaker. Dr. I. M. CASANOWICZ noted the strange fact that many primitive religious ideas bear a resemblance to the most advanced religious ideas of the present time. Dr. J. W. FEWKES said that primitive Indians are so low in the cultural scale that they develop only the most general religious principles, these being modified by the several geographic areas inhabited by them. He stated further that there is no unity in the primitive religions of the American Indians, though some parallelisms are found between the beliefs held in different areas. Dr. TRUMAN MICHELSON mentioned some differences between the religious ideas of the Northwest Coast Indians and those of the Algonquian tribes, one of the chief differences being that the latter do not believe in a plurality of souls.

FRANCES DENSMORE, *Secretary*.

Mythe

Lewis + Clark

Not verified for either tribes or localities - CSM

Washoo - Se-soo-te-al-le

Piute - Devil's Mortar
Pyramid Lake

Piute - Pah-he ag-gi

Yokut - Hoi-hoi-mus

Holkoma
Towiniche
cho-e-nim-ne
} Dove + Pigeon
chà-kar-te + 2 others

Wiktchumne - Origin - Negatives -

Wintoon - Marysville Buttes

Yu-go-tum-me - Pt. Reyes

Tongvā - Measure of length -

Washoo - Se-soo-te-al-le

Paiute - Pah-he ag-gi

Paiute - Devils Mortar

Yokut - Hoi-hoi-mus

Holkoma
cho-ki-nim-nah
cho-e-nim-ne
} chà-kar-te +
2 others

To-win-chi
Holkoma
} Dove + Pigeon

Kosh-chā-o - Yi-yil

Wintoon - Marysville Buttes

Yu-go-tum-me - Mouth Pt Reyes

Hoo-kor-e-ko
- marsh crane Noo-kah
- creation
- blow death Buzzards born
- ashes to Windward
- clam-shell armor Kah-kah

Karuka Myth

The Frog & the Fire — By Donatello

Redman, VII, 166-167, Dec. 1913 —

MYSTERIES OF THE FOREWORLD

Myths of the Mewan tribes of California

Miss Katherine Spiers
Los Angeles
goig to Fort. Alaska Ind. Mythes.

Look up Commencement No. of
Native American
can be had of Frederick P. Snyder
(Govt. Indian School) Phoenix, Ariz.

Angel De Cory (Siona woman)
employed by Lenglet to induce Indians
to use old primitive designs.
Also writes for magazines - Harper,
Scribner etc).

from

Judge Bartlett

Wearmouth

A grammar school teacher (a man) who reported that Prof. Kroeber's assistant had got myths from Indians which teacher ~~the~~ had taught children from school readers. (on Pitt River, island.

Requiem of the Ty-u-gas
of Clear Lake - Lee

Taylor, Calif. Farmer, Mar. 15, 1861.

good -

Coyote Stories. - Dixon, Journ. Folk-Lore,
vol. XIII, 267-270,

also vol. XVI,

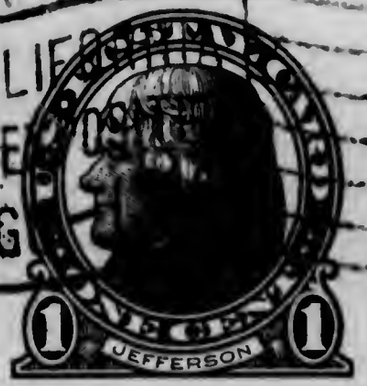
Legend of Dubuque, Romero 208

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Dr. C. Hart Merriam,
1919 16th St.,
Washington,
D.C.

COOPER ORNITHOLOGICAL CLUB

The regular monthly meeting of the Northern Division of the Cooper Ornithological Club will be held in the research room of the Museum of Vertebrate Zoology, University of California, Berkeley, Cal., on Thursday, April 20, 1916, at 8 p. m.

Speaker: Professor T. T. Waterman.

Subject: The Role played by Birds in the Mythologies of the Pacific Coast Indian Tribes.

MRS. J. T. ALLEN, Secretary.

Am. Anthropologist, Vol. 14, No. 1, Jan.-March 1912.

a notched stick or by a ladder, and the furniture is exceedingly simple. A peculiar feature, especially of the houses of the aristocrats, is the different floor levels. At the extreme end of the house, opposite the door, the floor is often raised from six inches to three feet, and the whole width of the house. This place is for guests and for the heads of the family. I have seen a house of an important old dato with three floor levels; on the highest level only the old dato and his wife and such persons as they might bid could come.

The fireplace is usually near the door, with bamboo tubes of water standing on end nearby; the better class have bamboo frames of various kinds for holding dishes, and always in its proper place in every house, even the poorest, is the *tambara*, the little bowl containing the usual offerings, the simplest form of house altar. The greatest of their altars, the *patanon*, or war altar, is also a house altar. The erection of this altar is allowed to only a very few high datos, and is connected with their most important festival, which occurs sometime during rice planting. The most significant ceremonies formerly attended this festival, which might last from two days to two weeks; but as in other regions of the earth, so here, the incoming of commerce and civilization kills the ancient culture and it is probable that if given at all in its entirety it is only in the remote regions of the mountains that this great festival of the *Ginum* is now observed with all its elaborate ceremonies. The Bagobos have other altars for different places and different occasions; altars for the planting of their corn or rice; for the cutting of their crops; and very often they place an altar with their offerings near a great tree or a beautiful spring or running water, especially if the water is to be used for any ceremony of purification.

A Note on the Personification of Fatigue among the Nez Percés, Kutenai, and other Tribes: Alexander F. Chamberlain

In common with other authorities, Dr Paul Ehrenreich, in his recent volume, *Allgemeine Mythologie* (Leipzig, 1910), takes the view (p. 159) that personifications of abstract ideas, etc., are of little mythological significance, being almost entirely of cultural or ceremonial import. Such personifications as do exist he regards as

not primarily personifications of such qualities, but originally representations of lunar personalities, as, *e. g.*, in the cases of the Greek Hermes-Autolykos (gambling and pleasure) and the gambling-deities of certain North American Indians. According to Ehrenreich, the hunting gods are "not really personifications of the hunt, but almost always the moon god, or at least beings furnished with lunar traits" (p. 160). But this is going too far in the way of panlunarism.

Among interesting personifications of abstract qualities among the North American Indians are *sleep* among the Ojibwa (Schoolcraft) and *hunger* among the Shuswap (Teit). Another case is that of *fatigue* among the Nez Percés and the Kutenai.

As Bartels (*Medicin d. Naturv.*, Leipzig, 1893) notes (p. 235), citing Bancroft (*Native Races*, vol. I, p. 284), among the Nez Percés there was a ceremony participated in annually by all the males of the tribe between the ages of 18 and 40. The ceremony, which lasted from three to five days, had as its most noticeable element the pushing of willow rods down the throat into the stomach, this being followed by hot and cold baths and fasting. The firm opinion of the Indians is that they thereby obtain great bodily strength and power of resistance to fatigue. The ceremony is held in order to overcome *Mawish*, the spirit of fatigue. This is the Nez Percé "spring-medicine," reported on recently by Dr Spinden. There are certain identities and resemblances in Kutenai and Nez Percé mythology, etc., that deserve careful study (one curious item is the presence in each of a character with *one* leg). *Mawish*, of course, is the Chinook jargon word for animal (*e. g.*, deer), and the deer figures prominently in the dances, etc., of the Kutenai.

Initial and Terminal Formulæ of Kutenai Tales:

Alexander F. Chamberlain

Although, in the adverb *pik'āks*, the Kutenai language has a word corresponding to our "long ago," "once upon a time," etc., so familiar as an initial formula in the tales and legends of many lands, this term does not appear as the customary beginning of such stories as have been recorded in the native text.

In narration the Kutenai employs the "historic present," as the grammarians term it, adding thus to the vividness of the story told. The great majority of the tales begin with a verb in the present tense, therefore, not with such a phrase as our "once upon a time," with its verb in the past tense. Examples of Kutenai initial formulæ are:

Kānaquē Skínkuts, Coyote is traveling.
Kānaquē tlántlā, Grizzly-Bear is traveling.
Káusākā'ne Wótak, Frog is there.
Kónitlāinē Skínkūts, Coyote is in his house.
Kónitláinē G'ótsāts, Chipmunk is in his house.
Tsináqē Skinkūts, Coyote sets out (starts off).
Kāktlūnăm'nē, There is a village.
Nātlqónē Djáis, He carries his brother on his back.

Very seldom is the order as above indicated inverted, as, *e. g.*, *Mitskákas Káusāk'á'nē*, "The Tomtit is there." The "Tale of Seven-Heads" begins: *Wistátlātlām sāhánē*, "Seven-Heads is bad"; a tale of the owl, *Kúpī tsákētláine*, "The Owl is a great thief." The term *äsmátlnē*, "together," begins a tale, as, *e. g.*, *Äsmátlnē tsináqē Skínkūts áqkī Náik'yū*, "Coyote and Fox set out together," although the formula *Skínkūts äsmátlnē*, etc., is also used.

Among the Kutenai, as with some other Indian tribes of the Oregon-Columbian region, the coyote who figures so largely in myth and legend is represented as being "on his travels"; so, too, with certain of the other animal characters. *Kānáqe Skinkúts* is the typical beginning of most of the stories in which he plays the chief rôle; *tsináqē*, "he starts off," "he sets out," is another initial formula of frequent occurrence in the animal-tales. The word *Káusāk'áinē* signifies "he is at," "he stays," "he stops," "he is there," "he is." Such beginnings as *Kónitláinē*, "he is in his house," "he is at home," and *Káktlūnäm'nē*, "there is a village," are quite picturesque.

Often there is no terminal formula in Kutenai stories. A common term, however, is *tágas*, "ended," "enough," "done," "finished." The phrase *tlátlónē*, "there is no more," also occurs. The terminal *Kāpét*, used by some of the Indians, seems to be the *Kopét* of the Chinook jargon, modified by supposed derivation from Kutenai *K'āpē*, "all."

TALES OF CALIFORNIA INDIANS

Invulnerable Grizzly Bear.

Panther lived with his brothers. He used to spend all the time hunting, but every time before he set out he used to say to his brothers, "You must not go to the top of the west ridge!"

One day the brothers said to each other, "Why does he always tell us that?"

Up on the ridge they saw, away off at the end of the timber, an old man lying with his legs crossed and his wife sitting beside him.

"Old man!" they shouted, "Come over and help us pound!"

"What did you say?" asked the old man.

"Come help us pound!"

"All right," he said. And he put on his grizzly-bear-skin blanket.

The two boys ran home and slid to the door of the house. They heard him coming.

"Boys, open the door for me!" he called. When they didn't open, he climbed up on the roof and came down the smoke-hole. The boys gave him some venison and he ate it. When he had finished it, they gave him another helping, and he ate that—he ate all the meat in the house—he ate the untanned hides. When he had finished he said, "Well, I'll go home!"

The boys opened the door, but he was so filled he couldn't get through, so he climbed out the smoke-hole.

When Panther, the oldest brother, came home he carried two deer.

"Didn't I tell you not to go up on the west ridge?" he said to his brothers, and he slapped them and pinched their faces.

All that night Panther was busy flaking arrow-points. In the morning he set out, carrying five quivers full of arrows. He came where the old man was lying and he shot him twice.

"Alo!" the old man cried, "What did you put in the fire that snaps so?"

"It's not the fire snapping this time," said the old woman, "He's shooting at you!"

Then the old man jumped up and took down the grizzly-bear blanket and put it on. The young man kept shooting back at him as he ran. Finally Panther had only one arrow left from his five quivers-full.

"Between his toes!" called the old woman.

Panther shot him there between the toes, and the old man rolled over dead.—Univ. of Cal. Bulletin.

Sherman Bulletin [Riverside, Calif.]
Dec. 10, 1913.

Why The Cyote Has a Thin Face

ERNEST MARSHALL — KLAMATH

Once upon a time there was a cyote that had three children which he loved very much. One day the cyote sent them out to pick acorns. The frost came up and the children froze. This made the cyote angry at the sun because he did not keep them warm. So he thought he would kill the sun. He filled his belt with sharp rocks and started to the east. He thought by getting to the first hill he would come to the sun. But he traveled for many days and he never came to the sun's house. After he had traveled over many mountains he finally reached the sun's house. There he waited until early in the morning. Then the sun came out. As soon as the sun saw the cyote he caught him and smashed his face together and so it is to this day

Sherman Bulletin [Riverside, Calif.]
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Sturnella's Song

(From "Out West," Los Angeles, Cal.,
May, 1903)

Sturnella's Song*

I.

NOW chant, ye poets olden,
Of fair Italia's valleys,
The tender passions told in
Thy Philomela's lay,
And boast in woodlands golden,
Before the winter rallies,
O Briton! of thy robin,
Whose song makes autumn gay.
Right well attuned such melodies
To ears of those who dwell at ease
'Mid groves of hoary olive trees,
Or Albion's merry throng.
Let others Philomela praise
In bright Isola Bella days;
But I will my Sturnella praise
And sing Sturnella's song.
"Cheer up! Cheer up! Chirree!
I carol cheerily.
A cloudless sun is rising now,
His early beams are strong.
Cheer up! Cheer up! Chirree!
A happy day to thee!"
Oh! listen to Sturnella,
To his heart-searching song.

II.

In cold, moist, mountain meadows
Begirt with forest shadows,
Where dew-decked webs of spiders,
Outshone the rising sun,
On bloody trail through Idaho
We sought the brave Nez Percé foe
On morn that now seems long ago,
So sadly years have run.
We wept for friends in battle slain,
Nor knew the moment when again
The wild war whoop might ring amain,
The answ'ring bugle sing a strain
The weary line along.
'Twas then that from a thicket near,
A voice dispelled the bitter tear,
'Twas then we heard Sturnella's clear,
His brave, death-daring song.
"Cheer up! Cheer up! Chirree!
Go forward cheerily.
The timid dies a thousand deaths,
The valiant dies but one.
Cheer up! Cheer up! Chirree!
The mountain high for me!"
Oh! listen to Sturnella,
To his death-daring song.

III.

Where arid plains extended,
With far horizon blended,
A toilsome way we wended,
When youth and strength were mine.
Through clouds of clinging dust we rode
And whinnying thirsty steeds bestrode,
That totter'd 'neath the heavy load
And glaring noonday shine.
We knew the lurking foe that lay,
Intent on working woe that day
On him who loitered by the way,
Or strayed the buttes among.
But oh! we knew when rest was near,
With pastures green and waters clear.
'Twas when we cried with joy to hear
The song Sturnella sung.

---

* *Sturnella neglecta magna*, the Western meadow-lark.

"Cheer up! Cheer up! I say.
My friend, the grass is gray
And short upon the high plateau,
But here 'tis green and long.
Cheer up! Cheer up! I say.
Cheer up and come this way."
Oh! listen to Sturnella,
His wild Dakota song.*

IV.

The pines, that once with shadows
Begirt the mountain meadows,
Lie prone before the woodman;
The dewy grass is mowed.
No more the war-whoop ringing shrill,
No more the bugle singing will
Recall to life the echoes still
Upon the trail we rode.
And changed is now the arid land;
Fields blossom 'mid the torrid sand;
Where once we camped, proud cities stand,
The past is swept along.
Yet one dear voice forever stays
Unchanged through all the changing days
And sings the wild, primeval lays.
It sings Sturnella's song.
"Cheer up! Cheer up! I sing.
Though Death may have its sting,
Some things survive eternally
That to the earth belong.
Cheer up! Cheer up! I sing.
I carol in the spring."
Oh! listen to Sturnella,
To his immortal song.

WASHINGTON MATTHEWS.

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*The Dakota Indians declare that the meadow-lark sings in their language. In one of his songs, Miss Millie M. Smith tells me, he says words which mean "My friend, the grass is gray."

TELLS WHY CHUCHUPATE MOUNTAIN PARK ON FRAZIER IS SO CALLED

By Evelyn Derby

Few people in Bakersfield have sufficiently adequate knowledge of the history of the Indians who formerly roamed through Kern County to be familiar with the lovely legends which they have handed down. Therefore many are wondering why the new playground has been given the name Chuchupate, the significance of which is this:

Once, before the pale-face had brought his strange laws and customs to California, there dwelt among the fathers of her tribe a lovely maiden called Chuchupate. The Great Spirit smiled upon her and gave her a deep love for all the flowers which carpeted the earth in spring, and the power to effect wondrous cures through the medicinal qualities of certain herbs. Visitors from neighboring tribes brought gifts of plants and grasses to Chuchupate, and these she planted and cared for. In times of plague and famine she aided her people, and when spring came again she read in the open faces of her loved flowers the messages of the Great Spirit. Thus she became high in the councils of the tribe and beloved of her people.

At last winter came no more for Chuchupate and the young braves mourned for the lovely maiden, lighting watch fires for her spirit. Without her the tribe suffered many ills, until the Great Spirit promised that Chuchupate would return to them again. At last when spring broke the icy clasp of winter, a little blue flower appeared, growing near the wigwams of the tribe and the Indians know that the spirit of Chuchupate had returned in the flower which now bears her name.

Now, when a child is born, the Indian mothers gather the pollen from the little blue flower and dust it over the new treasure in order that the blessing of Chuchupate might rest upon it. Also when a young brave of the tribe who loves a fickle maiden contrives to make her eat the leaves of Chuchupate, his affection is reciprocated.

Chuchupate is still the guardian of the wild flowers and when anyone in a spirit of vandalism destroys them, she is said to disappear and return no more. They alone are left to tell her story and truly she could have found no fairer reminder of her gentle spirit.

These blue flowers grow abundantly on Frazier Mountain and persons sponsoring the playground project think it only fitting the park should bear the name of the Indian goddess of love and flowers.—From Bakersfield Echo.

Exp. Indian Herald - August 1924.

SAN FRANCISCO CAL. CHRONICLE
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Yokut myth

Legend Says Indians to Rise, Walk North to Hunting Ground

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By CLICK RELANDER

VISALIA, Dec. 28—Today was the day Bumkee, aged Squaw valley Indian, was to rise from his grave in the Squaw Valley Cemetery and walk north.

It was the sixth day after his burial and Indian legend says Bumkee will rise from the ground and find a stone bridge over a bottomless chasm, which, if he can cross safely, will lead him into the happy hunting grounds.

Bumkee was born between 1843 and 1850, before Tulare county was broken up and parts renamed Fresno and Kern counties and before settlers at Visalia in 1852 decided a stockade was necessary for protection against roving Indians. He took an American name after an old family in the hill district, assuming the title of Pete Marlor.

In 1851 and 1852, when Bumkee was a boy, Indian chiefs of some 119 valley tribes gathered in the northern section of the valley and signed 18 treaties with a commission appointed by President Fillmore, assigning their rights to lands for a promise of home sites, stock, food, clothing and other supplies.

Then came the white man, and instead of receiving their promised dues the Indians were driven to desolate camp sites, to earn their living as poorly they might and to become charity charges in many instances.

Bumkee, like other Indians, believed that six days after his death he would rise from his grave, shake himself and, with unseeing eyes, turn northward. There he would find a stone bridge over a bottomless chasm. The bridge would be only 10 steps across, but it would be narrow and slippery. If he were a good Indian he could cross the bridge, but if not he would fall into the pit. If the crossing was safely made he would find many other Indians living in the happy hunting grounds, just as the old Yokuts lived before the coming of the white man and the Spaniard. He would find game in abundance and his wife's brush or tule hunt would be filled with baskets and skins.

So today Bumkee will either pass into the happy hunting grounds or vanish into the pit.

How Fire Was Brought To The Indians

After man was on earth, the Coyote began to plan to show hin some favor. The god of the Indians had made fire. It was hidden away in a casket guarded by two women.

The Coyote planned a way to steal some of the fire for the Indians. He gathered a number of animals to assist him in his plan. He placed each animal in certain places. An Indian was to go with the Coyote.

When they came to the end of his journey, the Coyote left the Indian in a cave and went himself to the hut. He knocked at the door. The door was opened by one of the women. He was asked to come in which he willingly did. He waited for quite awhile wondering when they would go to sleep. These women never went to sleep, that was why they were asked to guard this place. The Coyote felt tired so he went out to ask help of the Indian. When the Coyote came back with the Indian the women began to chase him. The Indian pretended he wanted to steal some fire, while they were doing this the Coyote took some of the fire and ran off to the Mountain Lion. When the two women saw him they began chasing him. When the two women thought they were about to catch him, he reached the Mountain Lion who took the burning brand next. Each time the women thought they were about to get the fire, the next animal would take it.

The last animal was the little squirrel. It was chosen because it could run fast. The squirrel took the burning brand next. He ran off so fast that his tail caught on fire. It hurt him so badly that he curled it up over his back, where it burned the little broun stripe which we still see today. The squirrel reached the next place where the frog was waiting patiently. The frog could not run so it just had to hop. He took the fire in his mouth; one of the women that was nearest grabbed the poor little creature by the tail. In order to get away the little frog gave its tail a pull which made the frog lose its tail. Jumping in to the water it swam across to the other side. There it sent the fire out to a log wood.

No grown up frog since that time has been known to have a tail.

Sherman Bull. Oct. 15, 1913.

no author or tribe given

How The Blue Bird Became Beautiful and The Fox Became Ugly

BY MYRTLE DUNCAN.

Once upon a time, long, long ago, a fox went to visit a blue-bird and being an unexpected visit the blue-bird, who lived so humbly, had no food in the house to set before the fox but a bright idea came to her and calling her children from play, she took them and made four pieces of delicious roast under the ashes which she placed before the fox who ate heartily after her long journey. Before the fox began to eat the blue-bird told her to be very careful and not break any of the bones and to place them in a pile which the fox did with the greatest care. After the fox had finished her meal, the blue-bird gently gathered up the bones and threw them into a pond, which was near by the house, dancing and singing "Sis ponny," meaning come back to life again and making about six revolutions around the pond she returned to the house. The children came back to life again and their plumage was more beautiful than before of which the mother blue-bird was very proud. The fox thought that since the blue-bird had beautiful plumage in the second life that she would like for her children to have beautiful fur and decided to do likewise and invited the blue-bird to visit her in four days which the blue-bird accepted most cordially. The four days seemed to have passed by rapidly, and at the dawn of a beautiful morning she went on her journey to the of home of the fox. The blue-bird arrived rather early and both being in good spirits were merrily chattering of different objects which seems so strange to use nowadays but what was true generations ago. Finally the fox said that she had no food in the house and did the same thing as the blue-bird, took her children and made two pieces of roast, but after the fox had thrown the bones into pond singing the same song and returned to the house waiting for the return of her children for some time, finally getting discouraged she asked the blue-bird why they did not come back to life again as she expected to see them return with beautiful fur. The blue-bird told her that she ought to have buried the bones instead of throwing them into the water. The fox ran quickly to the pond and gathered up the bones out of the water and buried them. Her children came back to life and were uglier then before so unto this day the fox wears his ugly features and ground color fur and the blue-bird its beautiful plumage.

Sherman Bull. April 22, 1914.

AN INDIAN STORY.

BY JOSEPHINE GOODBOO, JUNIOR CLASS.

MANY, many years ago, when the Indians claimed that animals were human beings, there lived in a beautiful valley near a large creek a mother bear with her three daughters with a coyote for a servant. Of course in those days the coyote was considered the smartest person on earth. Just beyond that valley on the hill was a small rock hut, in which lived a little lizzard, who had not a friend in the world but her grandmother, who was blind in both eyes. This little lizzard used to carry acorns to the bears every morning, and they would give her something in return to carry to her grandmother. One morning when the little lizzard went to give the things to the bears only the coyote was home. The bears had gone to the highest mountains to practice to become Indian doctors, and they had told the little lizzard to put the acorns she brought in a big rock pot which sat by the fire; but the coyote, who disliked the little lizzard, played a trick on her, and when the bears came back they planned a big feast. The coyote in playing his trick on the lizzard had emptied all of the acorns in the creek. So the bears did not invite the little lizzard to the feast, but in the mean time planned to kill her. That night the old grandmother had a very strange dream, and she told her little granddaughter about it, and said she would go and see the bears and find out what they wanted to take her life for. A dream in those days always came true, and when the little lizzard reached the house the coyote was watching for her and he ran and told the bears that the little lizzard was coming. The bears came out with rocks and stones and prepared to kill the little lizzard, but she slipped away and hid herself in the rocks. The bears were very angry to think that the little lizzard was smarter than they. In those days the moon ruled over the entire earth, and so the bears sent the coyote to the moon and told him to ask for a weapon to kill the little lizzard. The moon gave them a large flat stone and told them after they had killed the little lizzard to bury the stone. They killed the lizzard and told the coyote to bury the stone, but the coyote forgot it and left it by the creek. That night the little lizzard's grandmother waited for her until after dark, and being tired she went to bed and tried to sleep. Late in the night she was awakened by something biting her. She got up and found it was a large mosquito. The mosquito told her to come with him and he would show her where her granddaughter was. She went with the mosquito, and they found the little lizzard dead by the creek. Then the mosquito sang a song to the little lizzard and she came back to life. The little lizzard and her grandmother planned to kill the bears and coyote. That night the lizzard took the flat stone that the moon had given to the bears to kill her with and hid it in her rock hut. The next morning before the coyote was awake she took the stone and killed the three bears and the coyote, and then she and her grandmother went to live in the bears' home and lived happy forever after.

Sherman Bull. Jan. 19, 1911.

THE RED COYOTE.

ROSE MONTOYA, SIXTH GRADE.

ONCE UPON A TIME there lived a very large, bright-red coyote, and quite a distance away lived a very small wolf. This wolf was very old, but he never grew. He was lame. His toes on his right hind foot were all paralyzed, so that he could not run fast or walk very well. The red coyote was large and strong. He had a little brother, and he always made him stay at home when he had to be out, and this was very often One day the big brother coyote said to the little one, "I am going away today to see what I can find in the woods. If I do not return by sunset you lock the door and go to bed, and if anybody comes you must not let him in."

The big coyote started on his journey, taking with him a sack containing some potatoes. Pretty soon he came to the shade of a very large tree, and sitting down to rest he was soon fast asleep. Upon the highest branches of this tree was a big owl. He kept very quite, for he knew there was something good in that sack. When the coyote went to sleep he came down slowly and took out the potatoes and put some small rocks in their place so the coyote would not know that anything had happened to his potatoes. When he awoke he took his sack and threw it on his shoulders and started off on his journey. By this time it was almost dark and he was beginning to think about his little brother. He kept on going for a time and soon came to where he saw a big chicken that belonged to a poor fox. He ran and caught it and put it in his sack. He was very happy now and said to himself, "Now I can go home and have a nice dinner of boiled chicken and fried potatoes." But he did not start for home at once, for he knew he could not reach there, as it was too dark. As he was wandering along he saw a little red light a long distance away. He made haste to reach it and was soon very near. When he came to it he found it to be a pretty house. This house was the fox's home. He was paralyzed, but had many good friends who always came and kept house for him. So the coyote picked lots of little sticks and made a ladder high enough to reach the window so that he could see what was going on inside. When he looked in he found that there were lots of foxes inside and they were having a fine time. He knocked on the door and one of the fox's friends opened the door and welcomed the coyote. He went in with his big sack on his back. They asked him to take a seat and lay his sack down and to help himself to everything on the table. He laid his sack down and was only too glad to eat such good things, for he was very hungry. He did not want to eat the things in his sack, because he was saving them for his little brother at home. He soon forgot his sack, and when he had eaten all he wanted he asked for a bed. They gave him one and soon he was off to slumberland. Then the foxes all said, "Now is our chance. Here is a sack with a nice fat chicken." They took the chicken out and put in its place a rock of about equal weight. The next morning the coyote started back to his home with the sack. On his way he was all the time thinking about the good chicken in his sack. By this time the little brother was getting very anxious to see him and had started to meet his big brother. They met a short distance from their home. When the big brother saw the little one coming he said, "Run back and put some water in a big kettle to boil. I have a nice chicken for our dinner." The little brother did as he was told. When the big coyote reached home he untied the sack and turned it over the kettle, but to his surprise he found a stone and the hot water splashed on his head and all his hair came out. After that everybody called him "bald-headed coyote" for stealing other people's property.

Sherman Bull. Jan. 25, 1911.

WHY BEARS HAVE SMALL EARS.

IDA RICHARDSON, KLAMATH, THIRD GRADE

THERE once lived in a house a bear and two baby bears, and a tiger and two baby tigers. Every day the mother bear and the mother tiger went out to pick berries in the hills, leaving the little ones at home.

Every time the bear picked more berries than the tiger, the tiger would get angry and fight the bear. One day the mother bear said to her two little baby bears, "I will put this rock here in this corner of the house and if you see it jumping up and down you will know that I am fighting with the tiger, and if it drops to the ground you will know that I have been killed.

The next day came and they went out to pick berries again. The two little bears watched the rock just as the mother had told them to do. After a while they saw the rock jumping up and down, and in a short time it dropped to the ground. They knew by this that their mother was dead. They said to the two baby tigers, "Let us play hide and go seek." The tigers agreed to this. The bears built a hot fire in the house and sent the tigers in. They told them to scream if it got too hot, and they would let them out. In a very little while it became very hot in the house and the tigers began to scream, but the little bears would not let them out, for this was just what they wanted. It soon became so hot in the house that the tigers died. The little bears went in and put the little dead tigers in bed, so that the mother tiger would think that they were asleep.

When evening came the mother came home and told the little bear children to go and get some water while she and the little tigers should eat the mother bear, She then went to the bed and tried to wake her children, and found that they were dead.

She ran after the little bears. When they saw her coming they each cropped off their ears and put the pieces on each side of a rock, and when the tiger came along she grabbed the rock, thinking it was the bears. The little bears escaped. This is why the bear has small ears.

Sherman Bull. April 12, 1911.

The Desert Plants

PIMA LEGEND — MINNIE PATTON

Once upon a time an old woman and her grand children were living together far in the mountains.

One day the grandma had just got through grinding some wheat for bread when she told them she was going after some water and for them to be sure not to fight and spill her flour.

If they did she was going to take her stirring stick and whip them all.

The children agreed that they would be good.

So she took her pail and went on her errand but when she had gone a little ways from the house the naughty children got into a fuss and spilled the flour.

When the old woman came back and saw her flour spilled she was so angry that she took her stick and whipped them all.

After she had whipped them she felt very sorry for she was not used to treating them in this manner but she went out to do her cooking, and while she was out the the children said to one another, "We cannot stay here because she has whipped us, let us go away."

They all agreed to this so without taking anything with them they started on their journey.

In the mean time the old woman had gotten through with her cooking and was calling them to eat. Getting tired of calling she went in to see but they were not there, she saw their tracks and knew right away they had gone away. She hurriedly took her walking stick and started to go after them.

One of them looked back and saw her coming and told the rest.

The oldest of them said, "Don't go if she calls you, and if she trys to catch you turn into a mountain plant. Than the youngest one said, I'm going to turn into a ironwood bush" Before they were through telling what they were to change into the old woman caught the youngest child who turn into a small ironwood bush.

The next one she tried to catch changed into a Palo berde tree and so on.

The old woman tried again to catch the oldest one who stuck her for she was a tall cactus, and finding that she could not call the children back she herself changed into a large white stone.

All the plants on the mountains are ancestors of the old woman's grand daughters.

Sherman Bull. Dec. 31, 1913.

RABBIT'S NARROW ESCAPE.

HORACE WHITTAKER, PIMA, FIFTH GRADE.

ONCE UPON A TIME there were a rabbit and a coyote. The rabbit was a pet, shut up in a box. The coyote came around one night and the rabbit told him a long story of all the good things that he had to eat. The coyote said, "Let me take your place." "All right," said the rabbit, and crawled out. The rabbit tied him up in his place and then scampered away. Next morning when the rabbit's master came to look in the box he saw the coyote and went away again. He returned very soon with a pail that the hungry coyote thought was full of good things for him to eat, but it was not, for the man poured hot water on him. He struggled so hard that he freed himself and got away. As he was running along he said to himself, "I am going to kill rabbit when I find him." Pretty soon he came to a large rock and underneath it he found Mr. Rabbit. "Now I will eat you up," said coyote. The poor rabbit said, "Please don't eat me. If you will hold up this rock for me I will get you something nice to eat." The coyote was very hungry and crawled under the rock to hold it up while the rabbit ran laughing away. By and by the coyote was very tired and decided to stay no longer. He said, "I am not going to stay here any longer; I am tired. I don't care if the rock does fall down." You see the coyote did not know that the rock was just the same without having any one to hold it. He made one big jump and then looked around to see the rock fall, but when he saw it was just the same, that it never moved, he knew the rabbit had fooled him again, and he became more angry than ever. "I am going to kill that rabbit; I am going to kill that rabbit," he said over and over to himself as he loped along. Every minute he grew more angry. Just as the moon came up clear and round and yellow over the mountains the coyote came to a lake, in which the moon was reflected like a great round yellow cheese. There on the shore of the lake sat the rabbit. "Ah, ha!" laughed the coyote wickedly, "I've got you at last. I am going to kill you and eat you up." "Wait," said the rabbit, "until I get that great cheese that lies yonder." He pointed to the water, and, lo! the greedy coyote saw what he thought to be a big cheese. Not wanting to lose the cheese, he jumped far out into the middle of the lake and was drowned, but the rabbit lived to a good old age.

Sherman Bull. Feb. 8, 1911.

WHY RABBITS CAN JUMP.

LAURA PRADT, PUEBLO, SIXTH GRADE.

ONCE upon a time, many, many years ago, all the rabbits in the world lived together. They very often had great feasts which they enjoyed very much. On one of these occasions when they had carried the dancing and singing far into the night a great many fell asleep and left the others to enjoy the festivities

Presently it occurred to one that it would be more pleasant if the rabbits who were asleep could live in one place and all those who were awake and enjoying themselves could live in another. He thought by doing this they could find greater enjoyment in the feasts. They all thought as this one did and readily agreed to the suggestion, but one said, "Why should we go and leave our brothers and sisters here and not tell them where we are going?" Another said, "We are going away because they never help us when we are getting ready for these feasts. They are ready and willing to eat when everything is ready, but they do not help us in any way, so I think we should leave them to themselves and let them work for their living. One asked why they slept so much and the leader, the one who objected to leaving his brothers and sisters without first telling them where they were going, said, "When they went to sleep I gave them some water that came from the Lazy well. Whoever drinks of this water sleeps forever. As they are too lazy to work I thought they would like to sleep always." Then they all moved to another place and left the sleepers all fast asleep. A few months afterwards one of them went back to the old home to see if they all were still asleep, and how they were getting along. Their sleep did not last always, as was supposed it would on account of having drunk the water from Lazy well.

They were awake before this one came back to see how they were getting along, When they awoke they were all jumping around wondering where the others had gone and why they went away without telling them. They were jumping around to find some trace of the other crowd, but they could not, and ever since that time all the rabbits that were asleep have kept up their search for the missing party, and for this reason all rabbits can jump.

Sherman Bull. April 19, 1911.

WHY THE COYOTE IS SLY.

VICTOR SAKEASLEIVA, HOPI,
FIFTH GRADE B.

IN a rock near Oraibi there once lived a Rooster who had a very dear friend, the Turkey, that lived near by. They were so fond of each other that they dined together every evening.

One evening while they were chatting over their meal the Turkey said, "Friend Rooster, I think I shall go out to see the world. Would you not like to go, too? The Rooster was delighted with the idea and said so. They made their plans very carefully, and decided to take with them enough food to last several days. It was quite late when the Turkey left for home.

Before daylight, the Rooster was up. He went over to his friend's house to wake him. He packed his lunch quickly, and was soon ready to start. When the lazy sun came up it saw them on their way.

Their course was due west, for they decided to visit the Little Colorado river. They went joyously along the road, the Rooster, stopping every now and then to crow over some bright bit of gravel, while the Turkey gobbled his delight as he raced hither and thither after some bright bug or a bit of green grass.

They had gone about half the distance from their home when they saw some one coming toward them. When he came near, they knew it to be the Coyote of the plains. He was out looking for something to eat, and as he had traveled a long distance was very hungry. The Coyote stopped when he came up close and asked them where they were going. They said, "We are out to see the country." "Let me go with you," said he. The friends said that he might. So the three went on together.

When they reached the river it was late in the afternoon, and when the sun was low, they sought a place to camp for the night. The Coyote and the Rooster gathered some dry sticks, built a fire and then sat down to enjoy the warmth and the lunch that the Turkey had spread out. The Coyote had none so they shared theirs with him. He did not like corn meal however; in fact, he had never seen any before. But that was all they had so he had to go hungry. When it was time for them to retire for the night, the Rooster and Turkey went to roost in a tree. But the Coyote staid by the fire.

During the night, he called to them saying, "Help me up into the tree." Being kind-hearted and obliging they both came down and helped him as far as the first branch. He wanted to go higher, but they could not take him any farther. Then the friends went up to the very top of the tree to sleep. "Do not make a noise in the morning," he called after them.

When morning came the Rooster began to crow in his happy manner and waked a number of Indians who had camped by their fire during the night. They were startled by the sound, and one of them said "See the bird in that tree?" Raising his bow, he let the arrow fly. His aim was so true that he brought the Rooster down. Next they saw the poor Turkey, who tried to hide himself. But the Coyote, laid low till the hunters were gone away, and then made his escape.

This is the reason why turkeys and roosters are easily killed by hunters, and also why the coyote is sly and hard to find.

Sherman Bull. April 12, 1911.

A STORY OF TEN BROTHERS.

HELENA KENNEY, KLAMATH, FIFTH B.

THERE once lived an old father panther who had ten sons. Currouthe was the youngest. He was very good and kind and beloved by all his neighbors. His brothers disliked him, for he was the wisest and bravest. When they went hunting it was Currouthe who killed the most deer. Their grandmother, who was a wolf, was a very old woman. She used to tell the grandsons very often that some day Currouthe would be the bravest boy on earth. This made the nine very angry. Each day they would take him out and make him sit in a big fir tree, which stood near their den. While Currouthe was sitting there one day a mosquito flying by stopped to visit and talk with him awhile. She told him many things, and one day she said, "Make many, many arrows, for you will need them some day." Currouthe thought this was good advice and so he went to work to make many, many arrows, as the mosquito had said.

Old grandmother wolf lived alone near by a large creek. She was a good-luck medicine-maker and spent a great deal of her time out in the woods and among the mountains gathering herbs and digging roots, which she used in the making of medicine.

Early one cold, foggy morning she came to the panthers' house and told them that she was going up to Ponyharra. Ponyharra, which means "ghost," was a very high mountain some distance away. Very few creatures went near there, as they knew that those who went never returned home. What became of them no one knew, but they were never heard of again.

The panthers loved their old grandmother and with tears begged her not to go; but she told them not to weep, "For," said she, "I have been told in a dream to go there; I must go." They said no more, for they knew that she must obey her dream. "Good-by," said the wolf. "Keep together and go into the farthest corner of your den and stay there till you hear the coyote calling you."

They did as she said, and none went out of the house for five days. The panthers were startled one evening to hear the coyotes yelling near by, and, lo! there stood one under the fir tree near their house. He said, "I have a message for you, mother panther. Old mother wolf will come back in ten days. At the end of that time let your sons go swimming in the creek and out hunting." He darted away before they could ask him any questions. After consulting together about it they decided to do as coyote had said. So they departed.

One day there came by a huge flock of birds. Then they knew that the brothers had been killed. Currouthe remained at home making arrows. Ten days passed and they did not return. Currouthe said to his mother, "Mother, I must go look for my brothers." She did not want him to go, but she did not tell him to stay, because it would have done no good. He set out as his brothers had done ten days before for the wicked Mountain Ponyharra. He walked on and on and up and up. At last he reached the top of the mountain, and there in a basin lay a beautiful lake. He saw afar off something floating on the water. He went nearer and he saw the bodies of his old grandmother and his nine brothers. His heart was almost broken at the sight; but he set to work to bring them to land. After awhile he sat down—not to weep, but to sharpen his arrows. While he was thus busily engaged something came stealing stealthily along toward him. Currouthe looked and there bending over him was a great giant. "Ha, ha!" laughed the giant; "come and shoot marks with me." "All right," said Currouthe. The giant took the first shot and then came Currouthe's turn. He released the string and the arrow flew away out of sight. This frightened the giant, who said, "Let us exchange." Currouthe was willing, but he could not even lift the giant's bow, let alone shoot with it. Then the giant laughed again, "Ha, ha, ha!" He made so much noise that the echo down in the valley made mother panther tremble for fear. "It is the giant," she whispered.

"Currouthe, you are brave and strong," said the giant wickedly. "Come, if you are not afraid, and wrestle with me." Currouthe looked the giant over from head to heel and said, "How can I, who am no higher than your big toe, wrestle with you?" "It is possible for you to overthrow me if you can get hold of my toe." Then Currouthe sprang up, grabbed the giant by the toe and overthrew him. "I will kill you," said he, "if you do not bring my people to life." The giant did not want to do it, but, being afraid to die, he said, "I will do that if you will let me live." "But," said Currouthe, "bring them to life first and I will let you go." In the twinkling of an eye there stood the nine brothers and the dear old grandmother wolf before him, safe and sound. So Currouthe let the giant go. He went away limping.

The nine brothers then told Currouthe of their adventures. They said that they had come to the lake and saw their grandmother floating on it. While they were trying to get her out a great, huge creature came tearing along toward them. He carried a great bow and many arrows. They tried to run, but could not. "It was the giant," they said. "He asked us to shoot marks with him, and when one of us shot beyond him he became very angry and killed us one by one and threw us into the lake, where you found us."

They set out for home and when they came near they heard the sound of weeping. The brothers rushed in and found the mother panther sick with grief because she thought they were dead. "Are you really my sons?" cried she. They were all very happy after that and lived to a good old age.

Sherman Bull. Feb. 15, 1911.

MYTHOLOGY

MYTHS & MYTHOLOGY

574 **SUN LORE.**—Olcott (Wm. Tyler) Sun Lore of All Ages. A Collection of Myths and Legends Concerning the Sun and its Worship. *With 30 full-page illustrations.* 8vo, cloth. N.Y., 1914. Fine copy $3.00

Indians

Judson, Katharine Berry 1912

Myths and Legends of California and the Old Southwest Chicago, 1913

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